

COMPUTING RESEARCH NEWS

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Congress Change Could Mean Slight Changes in Science Policy

But First Job for New Congress is to Finish Old Appropriations

By Peter Harsha

With the change in Congressional leadership resulting from the Democrats' strong showing in November's mid-term elections, the landscape for research funding issues in Congress is expected to change in a number of ways, with outcomes that are, at this point, difficult to predict. For the research advocacy community, these changes will include new personalities heading every key Congressional committee and new legislative priorities for the Congressional leadership that could imperil recent gains in research funding commitments. But they may also include changes in the way Congress works—changing the number or organization of committees, for example, or altering their jurisdiction or membership—that could seriously impact how issues of importance to the research community play out in the legislative branch.

As this article goes to press, it is

somewhat unclear how the new Congress will look and function. Beyond the Congressional leadership positions and some key committee chairmanships, not much is known about how the committees will organize or who will lead the individual subcommittees. Final decisions on committee chairs will likely be made in January, with subcommittee chairmanships decided in late January—just in time to receive the President's fiscal year 2008 budget request the first Monday in February.

But the first task for the 110th Congress may be finishing up the work of the 109th Congress. Members of the 109th Congress reconvened after the November election, but failed to make progress on 11 unfinished appropriations bills (out of the 13 required to fund the operations of government annually), including the Science, State, Justice, and Commerce Appropriations and the Energy and Water

Appropriations bills that contain increases to the science agencies named in the President's American Competitiveness Initiative (ACI). Earlier Congress had managed to pass the single largest appropriations bill—the FY 07 Defense Appropriations—but could only do so after agreeing to break the spending cap for the bill by \$5 billion. The resulting appropriations shortfall—that \$5 billion would have to be found somewhere in the remaining 11 appropriations bills—helped the Congressional Republican leadership decide that it no longer had the stomach for dealing with the FY 07 appropriations process. Instead, they pushed through a “continuing resolution,” funding the operations of the federal government at FY 06 spending levels until February 2007, effectively dumping the appropriations problem onto the incoming Democratic leadership.

The science advocacy community expressed great concern with this development. The continuing

resolution effectively freezes federal spending at the previous year's levels and prevents the start of new programs at federal agencies. In a year in which the community has been largely successful at encouraging Congress to embrace the funding increases for the National Science Foundation, National Institute of Standards and Technology, and Department of Energy's Office of Science called for in the ACI, this delaying of the appropriations process—effectively starting it over in the new Congress—is seen as imperiling those hard-earned gains. Though it is likely the Democratic leadership will ultimately help enact the funding increases called for in the ACI—indeed, the Democratic Innovation Agenda announced by Speaker-elect Nancy Pelosi (D-CA) in December 2005 expresses strong support for increases along the lines of those proposed in the ACI, and

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Avaya Labs Research – Thriving In Pasteur's Quadrant

By Jon Bentley, Ravi Sethi, and David Weiss

“The best way to have a good idea is to have lots of ideas.”

[Linus Pauling]

Avaya Labs Research (Research) was created in 2000 when Avaya spun off from Lucent, inheriting and now extending the 75-year tradition of Bell Labs Research. We are responsible for advancing high-potential technologies, understanding customer trends and needs, and establishing alliances with both academia and industry to introduce innovative technologies and competitive solutions. We partner closely with Avaya business units to generate and trial ideas that form the basis for next-generation, enterprise-based telecommunications.

We thrive on generating and testing new ideas. Our preference is for ideas of fundamental interest that

also have direct application to Avaya's business. Donald Stokes labeled such problems as occupying 'Pasteur's Quadrant' in his 1997 book of that name. Just as the great microbiologist found fundamental problems in the difficulties brought to him by the industries of his time, so we look for the fundamental problems in the communication needs brought to us by enterprises. Inside Avaya, our solutions are incorporated into products and services; externally, they are published in research venues.

We focus on Pasteur's quadrant by organizing into research projects and realization projects. Problems come to us either through business needs or inspirations for future technology. For example, several years ago we had a vision for how to use enterprise directories, event databases, language parsing technology, and user preferences to notify users of events of

interest anytime, anywhere, on any communications device. We formed a research project to prototype the technology and, having established feasibility, moved it to a realization project to trial it internally. Following the trial, the realization project partnered with a product division to move it into an Avaya product.

Ravi Sethi, President, Avaya Labs leads Research. Previously, Sethi headed Communications Sciences Research at Bell Labs. Avaya Labs Research is organized into six departments: 1) Collaborative Applications, 2) Data Analysis, 3) IP Communications, 4) Multimedia Technologies, 5) Networked Systems, and 6) Software Technology.

Woven into these areas is a realization function whose purpose is to make our work more effective in

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Expanding the Pipeline

CRA-W Cohort of Associate Professors

By Mary Jane Irwin and Mary Lou Soffa

National discussions on global competitiveness often overlook the role that diversity must play: we cannot expect our nation's IT workforce to meet its goals if we fail to fully engage most of our population in that effort.

By failing to attract women, minorities, and persons with disabilities to IT, we are ceding our global position in innovation. Women make up the largest of these groups, and they are underrepresented in the workforce as a whole and at the highest ranks in particular. Women hold just 27 percent of professional computing-related positions and only 15 percent of board and executive officer positions in the top IT-related companies.¹

In academia, they currently hold 14.9 percent of CSE faculty positions, but often these are the positions having lower pay, rank, and prestige. Women make up 26.7 percent of the teaching faculty, but in the tenure ranks they are represented in increasingly smaller percentages: 17.3 percent of Assistant Professors, 12.5 percent of Associate Professors, and only 9.8 percent of Full Professors.² The lack of women in the highest academic ranks is particularly distressing. These are the women who provide the teachers, role models, mentors, and "existence proofs" that female students need if they are to see careers in CSE as viable, and that male students need if they are to develop appropriately balanced views of female colleagues.

There is evidence that women face formidable hurdles in the promotion to full professor across all of science and engineering. A well-publicized 1999 report on the MIT science faculty,³ for example, found that women faculty often felt "marginalized and excluded from a significant role in their departments," and that such discrimination affected senior faculty far more than junior faculty. Women at MIT were overlooked for jobs, paid less, given less lab space, and assigned the worst teaching loads. A subsequent meeting of leaders from nine major universities issued a statement recognizing that barriers still exist.⁴

A more recent national report found that: "Women faculty are paid less, are promoted more slowly, receive fewer honors, and hold fewer leadership positions than men. These discrepancies do not appear to be based on productivity, the significance of their work, or any other measure of performance."⁵ Speaking of science in general, Rita R. Colwell, past Director of the National Science Foundation, said: "We've lost some awfully good talent" because women "don't see a level playing field."⁶

CRA-W aims to change these findings with a novel program called the *Cohort of Associate Professors Project (CAPP)*. Since 2004, CRA-W has been able to run CAPP with the support of two NSF ADVANCE Leadership Grants. The goal is to

increase the number of women in the full professor rank in computer science and engineering by forming and mentoring a cohort of women from the associate professor ranks. The cornerstone of the Cohort Project is the involvement of senior women, appointed as CRA-W Distinguished Professors, who actively participate as role models, mentors, and advisers. The project initially built a community of associate professors in research institutions, providing them with mentoring, leadership training, encouragement and ongoing peer-support activities. This year, CRA-W expanded CAPP to include faculty from the smaller schools and four-year colleges. Roughly forty participants attended each of our CAPP "kickoff" workshops held in 2004, 2005, and 2006.

The workshops consisted of two days of events. On the first day the Distinguished Professors led sessions related to promotion and building a leadership role in the computing community. Topics included *Getting Promoted to Full Professor*, *Taking Charge of Your Career*, *Professional Volunteerism*, *Planning Sabbaticals and Remote Collaborations*, and *Time Management*. There was also a one-on-one vitae review with the participants and Distinguished Professors. On the second day, each workshop included a professional development seminar. For example, this past year, Lee Warren from Harvard University discussed *Strategies for Leading Change*. The participation of the Distinguished Professors, the opportunities to network with the other Associate Professors, and the workshop content were rated highly by attendees:

"Although some aspects continue to be discouraging (seeing all the accomplishments of the distinguished profs and feeling they are out of reach), overall I find the workshops very empowering, and I have also made some great contacts with people, both distinguished profs and peers, that I would not have made without the workshops. I think the workshops have really helped my confidence and made me feel that I am not alone in the obstacles I face, and that they are surmountable."

"After I got back from the workshop I left for a job interview on the next day. What I learned from the workshop helped me not to be afraid to negotiate. Even though the interview was not meant to be for a full professor position and I didn't plan to, I negotiated and was offered a tenured position with promotion to full professor. I owe this to the CRA-W CAPP team. Your effort didn't go wasted."

"If nothing else, the workshop inspired me to think about planning to go for full professor, rather than being comfortable in my post-tenure status. I have put my name forward to be considered for full professor in the upcoming P&T cycle. I don't think I would have done that without the

workshop, because I would have thought about promotion as something currently beyond my grasp."

"It is great to have peers who are dealing with the same issues and to have the insights of successful women as a background for developing career strategies."

"Attending the workshop has helped me to improve my assertiveness some. It was great to meet the distinguished mentors and other women in my field at the same career level, as I have often felt isolated at my own institution."

"The CV review with a senior person was wonderful."

"[I am] more confident and [have] higher expectations about salaries and promotion. I became more open about ways of improving. Some things are slowly getting better. I would have attended the workshop again. I am sure it helped me in theory and practice!"

CRA-W is currently engaged in an in-depth evaluation of the CAPP project, tracking the participants through the years, and will report on the results later. However, our study so far indicates that three participants were promoted to full professors last year. Although the number is small, the Taulbee Survey found only 11 women associate professors were promoted to full professors in 2004-05. Importantly, many of the CAPP participants are preparing for promotion in the near future.

Ultimately, we must increase the representation of women in the IT workforce, but despite numerous efforts progress has been elusive. CSE is, in fact, the only scientific discipline that has experienced a significant drop-off in the participation of undergraduate women in the past twenty years. Why have other sciences done better? The answer may be, in part, because of the presence of senior women faculty in other scientific fields who serve as leaders for young girls and women. Shirley M. Tilghman, the president of Princeton University, described it as "The rich get richer." In her own field of Molecular Biology, she says: "There were great female founders in the field in the early 20th century who inspired generations of women, creating opportunities for women to thrive and reach National Academy of Sciences status. These were role models, catalysts."⁷ It is just such a "female factor" that is being strengthened by CAPP.

For more information on CAPP, see <http://www.cra.org/Activities/craw/capp>.

Mary Lou Soffa is Department Chair and Owen. R. Cheatham Professor of Computer Science at the University of Virginia. Mary Jane Irwin is Evan Pugh Professor and A. Robert Noll Chair in the Department of Computer Science and Engineering at Penn State University.

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CRA Announces Outstanding Undergraduate Award Winners

The Computing Research Association honors the recipients of the CRA Outstanding Undergraduate Awards for 2007, sponsored this year by Microsoft Research. Mitsubishi Electric Research Labs and Microsoft Research are sponsors in alternate years.

Winner, Female Award



Stephanie Rosenthal is a senior at **Carnegie Mellon University** majoring in Computer Science.

Stephanie's initial research at CMU was on social robotics and led to two publications. More recently, she has done research on collaborative learning. She investigated potential interfaces for use with interactive whiteboards and designed and ran a set of experiments about issues in collaboration, which resulted in a first-authored publication.

Stephanie's interest in robotics goes back to high school. While completing her senior year of high school she also worked at the Naval Research Lab where she did research on social robotics. At CMU, Stephanie has been active in student government and is a student member of two curriculum review committees. She has been very involved in recruiting and maintaining female participation in computer science. Since her freshman year, Stephanie has been an active member of the Women@SCS program and has organized their Big Sister/Little Sister mentoring program.

Winner, Male Award



Lester Mackey is a senior at **Princeton University** majoring in Computer Science.

Lester's main research efforts concern

developing formal techniques for proving that software produces correct results, even when the hardware in the presence of intermittent hardware faults. He and his group at Princeton have been working on developing the first compiler system that can automatically produce proofs that the code it generates runs correctly on faulty hardware. This work has led to multiple conference papers (one published already, one submitted, and one in preparation) for which Lester is a key author.

In addition to doing high-quality research, Lester has been very active in helping his fellow students. He is a Resident College tutor for struggling students and a member of the computer science undergraduate student council. He is a member of the Chapel Choir and active in Princeton's Music Outreach Program, as well as being a prize-winning author and a senior staff member of *The Prism*, a magazine that promotes diversity.

Runner-Up, Female Award



Ana Pop is a senior at the **University of British Columbia** majoring in Computer Engineering.

Her research has been on the computational prediction of the structure of bio-molecules based on physical models rather than on comparative techniques. She implemented a dynamic programming algorithm for RNA secondary structure prediction. In completely separate work she has done research on the 'nonbacktracking spectrum' of graphs. The work has led to interesting results, which have been submitted as a short paper to *Experimental Mathematics*.

Ana completed high school in only two years, and has continued rapid advancement by immersing herself in graduate-level research since early in her college career. At UBC, she has received hard-to-get scholarships from both General Motors and IBM.

Runner-Up, Female Award



Kristal Sauer is a senior at the **University of Nevada Las Vegas** with a dual major in Computer Science and

Electrical Engineering.

For the past several years, Kristal has been involved in a NASA-sponsored research project involving Human-Computer Interaction via hand pose reconstruction. Her work has focused on developing mathematically-based algorithms for camera calibration, as well as implementing statistical pattern-recognition techniques for computer vision. Though only an undergraduate, Kristal has become the chief programmer for the grant. Her work has resulted in four publications, one of which is first-authored.

Kristal has a near-perfect GPA and is on track to complete all the requirements for both a CS and an EE degree in five years. She has been a strong member of research teams formed primarily of graduate students since early in her time at UNLV.

Runner-Up, Male Award



Matei Zaharia is a senior at the **University of Waterloo** majoring in Computer Science.

Matei's research has focused on two areas related to networking—peer-to-peer systems and wireless networking. He has worked on efficient search algorithms for peer-to-peer networks, and improving

recall in large, unmanaged, user-content storage systems in the presence of spelling errors. This work has led to two publications, one of which is first-authored. His current work is on communication protocols that can maintain sessions across disconnections.

In addition to maintaining a near-perfect GPA, Matei has been very active and successful in programming contests. During high school, he won a silver medal two years in a row at the International Olympiad of Informatics. At Waterloo, he was twice a member of teams participating in the ACM programming championship. In the first year his team tied for 15th in the world, and in the second year his team placed 4th in the world and 1st in North America. Competing individually, he placed 15th (out of 14,500) at the Google Code Jam.

Finalists, Female Award

Donya Quick, Southern Methodist University; **Olga Russakovsky**, Stanford University; and **Ekaterina Spriggs**, University of Arizona.

Finalists, Male Award

Thomas Achtemichuk, Pace University; **Jason Ansel**, Northeastern University; **Benjamin Hindman**, University of Washington; **Michael Kasick**, Carnegie Mellon University; **Mihir Kedia**, Carnegie Mellon University; **Abninder Litt**, University of Waterloo; and **Alexander Rush**, Harvard University.

Honorable Mention, Female Award

Azza Abouzied, Dalhousie University; **Oluwabukola Akinbo**, University of South Florida; **Jessica Chang**, University of Maryland, College Park; **Kristina Chodorow**, New York University; **Kelly Conway**, Cornell University; **Daria Craciunoiu**, University of Washington; **Tamara Denning**, University of California, San Diego; **Holly Esquivel**, University of Nebraska at Kearney; **Kathy Goodson**, Harvard University; **Ranjitha Kumar**, Stanford University; **Tracy Lau**, University of British Columbia; **Katherine Trushkowsky**, Duke University; **Tracy Wang**, University of California, Berkeley; and **Jessica Young**, Roanoke College.

Honorable Mention, Male Award

Adam Aviv, Columbia University; **Bryan Boyd**, Texas A&M University; **Robert Carroll**, University of Washington; **Maxime Chevalier-Boisvert**, McGill University; **Robert Cleric**, University of Pittsburgh; **Henry Cook**, University of Virginia; **Mihai Cucuringu**, Hiram College; **Alexei Czeskis**, Purdue University; **William Dabney**, University of Oklahoma; **Charles de Granville**, University of Oklahoma; **Patrick Donovan**, McGill University; **John Duchi**, Stanford University; **Robert Dyer**, Iowa State University; **Matthew Fisher**, California Institute of Technology; **Daniel Fridrich**, Duke University; **Yannick Gingras**, Université du Québec à Montréal; **Anthony Gitter**, Arizona State University; **Kevin Grimaldi**, University of Massachusetts Amherst; **Matthew Harper**, Michigan Technological University; **Evan Herbst**, Cornell University; **Jui-Yi Kao**, University of Waterloo; **Anirudh Koul**, Dalhousie University; **Hai-Son Le**, University of Texas at Austin; **Daniel Leventhal**, Brown University; **Tyler Lu**, University of Waterloo; **Matthew Marzilli**, University of Massachusetts Amherst; **Pyry Matikainen**, Harvey Mudd College; **Daniel McFarlin**, Indiana University; **Brendan Meeder**, Carnegie Mellon University; **Leo Meyerovich**, Brown University; **Greg Nicholas**, University of Pittsburgh; **Ryan Stutsman**, Purdue University; **Sergei Temkin**, Belmont University; **David Turner**, Drexel University; **Adam Vogel**, University of Illinois at Urbana-Champaign; **Vladislav Voroninski**, University of California, Los Angeles; **David Weiss**, Princeton University; **Andrew Wisner**, University of California, Santa Cruz; and **Haoqi Zhang**, Harvard University.

*This year's selection committee included **Richard Waters** (Mitsubishi Electric Research Labs), Chair; **Anne Condon** (University of British Columbia); **Dorothy Deremer** (Montclair State University); **Dinesh Mehta** (Colorado School of Mines); and **Melissa O'Neill** (Harvey Mudd College). ■*

CRA Service Awards 2007

**Distinguished Service Award
and
A. Nico Habermann Award**

Nomination Deadline: **February 2, 2007**

See: <http://www.cra.org>

Inventing the Future

By Peter A. Freeman
Assistant Director of NSF for CISE

“Don’t worry about what anybody else is going to do . . . The best way to predict the future is to invent it. Really smart people with reasonable funding can do just about anything that doesn’t violate too many of Newton’s Laws!”

Alan Kay, 1971

Perhaps the primary thing that excites most of us is captured in Alan’s famous quote. That was true for me in 1963 as a graduate student taking my first AI course, and in spite of all the invention that has occurred in the past forty-three years it is still the thing that I find the most exciting.

In the context of this quote, and as I leave NSF, I invite you to review with me how well CISE is positioned to invent the future. In the space available I cannot review the entire computing innovation ecology (NSF is funding an Academy study on exactly this question; see: http://www7.nationalacademies.org/cstb/project_ecosystem.html). I can, however, review the situation at NSF, which continues to be the funding mainstay of basic computer science and engineering research.

Before proceeding, we can stipulate that significantly more funding is needed and that we need to continue to make CISE a more flexible, focused, strategically acting organization. That said, I can assert (proudly) that CISE is much better positioned to help invent the future than it was five years ago. For example:

- The innovation capacity (funding) of CISE has doubled due to the ITR program and other budget increases.
- Its excellent staff are motivated not only to fund the best science, but to search for new and innovative directions (as reflected in a number of new activities).
- There is a heightened understanding that CISE exists to serve the community and must be responsive and responsible in all our actions.
- The overall attitude at all levels of CISE ensures that we are focusing our funding on the most important challenges for the future (e.g., networking, computational discovery)—not only supporting the confirmatory and incremental work that is also important.
- There is a willingness to support new modalities of work (e.g., larger awards, groups, consortia, center-scale activities).

Obviously, these improvements have not come about in a vacuum; in the final analysis, they are due to you, the community. You should be proud of what we have done together in the recent past, and look toward a future in which our community continues to mature and perform on the national stage.

Let me turn now to some principles that I believe are illustrated in where CISE is today. Let’s start with the ITR program that originated under Ruzena

Bajcsy’s guidance in 2000 and continued giving new grants through 2004. That program doubled the CISE budget in just five years, and those funds, which all remain in the CISE budget, provide us the heft and flexibility to do the things we are now pursuing. Perhaps more importantly, the vast array of new and innovative ITR projects that you carried out, often in collaboration with colleagues from other fields, pointed the way to a number of new and exciting visions for the future (not that we didn’t already have a lot). In short, we significantly expanded the space of things that don’t seem to violate Newton’s laws, and in the process showed that significant funding could be put to good use. That provides a great base for the next level of inventing the future.

I believe two principles are revealed here:

1. *The size of the total funding in CISE matters—not only to be able to provide more to the community, but in relation to other parts of NSF and other agencies.*
2. *Important new directions for fundamental investigation can be uncovered when working closely with other disciplines.*

In the past five years we have started a number of other new activities at NSF, including focused work on cybertrust, information integration, computing education, broadening participation, science of design, new networking research, large-scale research infrastructure, and cooperative community action. Let me say a few words about some of these.

Our effort in cybertrust (or cybersecurity or information security) doesn’t need much comment, nor does information integration, since both extend, sharpen, and expand work that was already well underway in our community and is well understood. They do, however, illustrate the value of emphasizing work in an area for some period of time, of bringing perhaps related but dispersed lines of work together, and for having sufficient funds beyond what is needed for base level support of an ongoing disciplinary area. In the same way, our efforts in information integration built on previous work (digital libraries, databases, search techniques), and primarily pointed existing work in new directions.

- *Focused funding on a specific topic, perhaps for a limited period, is essential.*

The Science of Design (SoD) activity illustrates a different mode of activity that we have used more than in the past—providing funding for an entirely new research activity that is

intended (in this case) to address a perceived need for a new (and more fundamental) direction in research. Specifically, the SoD program was started to encourage a focus on fundamentals of software development that over time (if successful) will be able to form the basis for significantly more productive means of creating complex software. This is a mode of activity that other agencies (notably DARPA) have employed to great effect in the past, and that I believe CISE must do much more of in the future.

I think that what this illustrates is:

- *CISE has the responsibility to articulate and fund entirely new directions.*

Our ongoing effort to broaden participation in computing (the BPC program) and our recently announced effort (CPATH) to revitalize computing education illustrate this same modality of focus on a specific issue that is deemed of high importance to the field and to the Nation. At the same time, they also illustrate a characteristic that has not been common in CISE—namely, attempting to bring about demonstrable change in the state of the world, not just in the state of knowledge. As we as a community learn from these programs and how to do them better, I fervently believe that CISE must continue to be a very active partner in efforts to move our field forward.

The GENI Program exemplifies both of these principles and employs a third. Clearly, the GENI Research Program (currently FIND and SING) is focused on new and fundamental research in networking. Further, it employs a principle that I flippanantly characterized in an earlier column as going for BHAGs—big, hirsute, audacious goals—not just incremental work within a known framework. We should have vision on a grand scale and not be timid in pursuing the fulfillment of that vision (“inventing the future”).

- *Have bold, grand visions and don’t be timid!*

Commensurate with that is the other part of the GENI Program—the GENI Facility. It is big, it is audacious, and it illustrates yet another principle that CISE has not previously employed for the benefit of the computing research community—namely, that sometimes visionary science requires major investments in research equipment (instruments). To explore properly some of the research questions we generate, we must not be timid in asking for our fair share of the funds that are devoted to such scientific instruments for other fields. The GENI Program also, by the way, emphasizes the importance of

experimentation in our field—a long-utilized principle that has not been so heavily employed as our systems have grown in size.

- *Big visions may take big investments; we shouldn’t be timid.*

The final activity I want to address is the need for community action. Individual investigations and educational activities will always be the bedrock of computer science. Yet, as we mature as a field, expand in size, and grow in importance to all of society, we need to find mechanisms to bring us together for cooperative action that will ultimately benefit our entire community and the rest of society. We created the Computing Community Consortium for just this reason. See: <http://www.cra.org/cc/>.

- *We are stronger together when addressing community-wide issues.*

Whether it is obtaining more funding for individual investigators, reforming our part of the educational system, obtaining funds for very large projects, making sure that damaging legislation is not passed, or addressing any of many other efforts, in the halls of government and the court of public opinion we will always be stronger as a community than as individuals. This is not to say that we must have unanimity, but there is a time for debate and a time for presenting our collective opinion. Busy decision-makers who are confronted with dozens of demands or proposals for spending resources or passing legislation look for well-articulated cases that demonstrate the support of major parts of a community. The CCC is one way in which as a community we can develop visions and support, but its success will depend on your direct and sustained involvement.

So, what does all this have to do with the future?

As I leave NSF after almost five years, I have been asking myself if my efforts (and those of my colleagues) over that time have made, or will make, a difference. One way of asking that question is to ask if NSF/CISE is doing its part to help us invent the future. This short review is a small attempt to uncover some principles and abstract from the day-to-day of the grants process. Ultimately, it is up to others to answer that question definitively.

At the same time, I believe that within the constraints under which we operate, NSF/CISE is better positioned today—and thus, so is the field—than it was five years ago to help you invent the future. I am passionately optimistic about the future of our field and our ability to invent it. At the same time, it will

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Musings from the Chair

Random Ramblings

By Dan Reed, CRA Board Chair



The November mid-term election changed the political landscape in Washington, with both the House and Senate shifting from Republican to Democratic control. As I write this column, many TV pundits are busily debating the broad implications of this change. More cogently, CRA's Peter Harsha is writing about the policy ramifications in both the CRA government affairs blog (www.cra.org/govaffairs/blog) and elsewhere in this issue of CRN. Meanwhile, CRA is not waiting for the policy waters to clear, but is continuing an active role in the Task Force on the Future of American Innovation, advocating increased funding for the physical sciences, of which computing is a central component.

As part of this activity, we remain hopeful that some version of the American Competitiveness Initiative (ACI), albeit probably not by that name, will be approved. The initiative would place the National Science Foundation and the Department of Energy's Office of Science on a budgetary doubling trajectory that complements that experienced by the National Institutes of Health. This badly needed "shot in the arm" would help address the disparity between proposal submission and acceptance rates and enable NSF to invest in new initiatives.

In previous columns, I wrote about the nascent Computing Community Consortium (CCC), whose goal is to foster research visions and community initiatives (www.cra.org/ccc). I am pleased to report that the interim CCC council is now operational, with processes underway to create a broadly inclusive, permanent council. In the meantime, the interim

council is moving ahead, in partnership with NSF, to launch a suite of CCC activities. Concurrently, CRA is seeking the additional staff needed to support the CCC council and its community engagement. All of us involved in the CCC welcome your ideas and your participation.

As a member of the President's Council of Science and Technology Advisors (PCAST), I am co-chairing (with George Scalise, head of the Semiconductor Industry Association) a review of the Networking and Information Technology Research and Development (NITRD) program. NITRD is the umbrella for all Federal research programs in IT. The PCAST review is evaluating the balance of the program components and investment levels in the context of the U.S. competitive position. Our goal is to produce a report by the spring of 2007. As with the CCC, I welcome any insights and opinions you may have on our

Federal research priorities and investment levels.

Finally, as many of you know, Peter Freeman recently announced that he was leaving the National Science Foundation to join the Washington Advisory Group. On behalf of CRA, I would like to express the computing community's thanks to Peter for his service as the Assistant Director for Computer and Information Science and Engineering (CISE) at NSF. Thank you, Peter, for your hard work and your support for computing!

Dan Reed, CRA's Board Chair, is the Chancellor's Eminent Professor and Vice-Chancellor for Information Technology at the University of North Carolina at Chapel Hill. He also directs the Interdisciplinary Renaissance Computing Institute (RENCI). Contact him at: reed@renci.org.

Request for Nominations

Computing Community Consortium Council Chair and Members

Nominations are hereby solicited for both the chair and council members of the Computing Community Consortium (CCC). The CCC was established by a cooperative agreement by the National Science Foundation to operate under the auspices of the Computing Research Association (CRA), with the stated mission:

The challenge for the Computing Community Consortium is to catalyze the computing research community to debate longer range, more audacious research challenges; to build consensus around research visions; to articulate those research visions; to evolve the most promising visions toward clearly defined initiatives; and to work with funding organizations to move the challenges and visions toward funding initiatives. The CCC will do this without harming the research environment that has created the computing world of today.

The core leadership for the CCC will come from the CCC Council, described as:

... a group with the stature, diversity, and longevity needed for the CCC to be effective. The Council's role is to stimulate and facilitate visioning. The Council is responsible not for doing the visioning, but for putting processes into place that stimulate and facilitate visioning by the computing research community.

The Council will be led by a chair, which will be a part-time, paid position. It will have 12 to 15 members representing the many different constituencies of the computing research community. See

<http://www.cra.org/ccc/council-description.html> for a detailed description of the responsibilities and desired attributes of the council chair and members. The chair and council members will be people with exemplary records of leadership in computing. They must be effective at working with others to develop long-range strategies and they must be able to work with people from diverse backgrounds through a consensus process.

The CCC aspires to have a council that spans the field of computing, including computer science, computer engineering, computational science, and information science. It should also have representation from different types of organizations, including universities (large and small, public and private), industry, and government or government-sponsored laboratories. Diversity considerations will also include geographic distribution, gender and ethnic diversity, and academic seniority.

The interim CCC Council has established a Nominating Committee to fill the initial chair and council positions, consisting of:

Phil Bernstein, Microsoft Research
Erich Bloch, Washington Advisory Group
Randy Bryant, Carnegie Mellon U. (chair)
Deborah Estrin, UCLA
Mary Jane Irwin, Penn State
Larry Smarr, UCSD
Jack Stankovic, U. Virginia

Please send your nominations to Andrew Bernat (abernat@cra.org). Include with your nomination the following information:

1. Name
2. Contact information (address, email, phone, home page)
3. Area(s) of expertise in computing
4. A brief (300-word maximum) description of how this person meets the desired characteristics given in the job description.
5. An indication as to whether you have discussed the position with the candidate and his or her willingness to serve.

Nominations for the chair will be accepted up to December 31, 2006, and for council members up to January 31, 2007. ■

Expanding the Pipeline
from Page 2

Notes

1. National Center for Women in Information Technology, *The 2006 NCWIT Scorecard*, to be published, see <http://www.ncwit.org/what.publication.html>, 2006.
2. Computing Research Association. 2004-2005 Taulbee Survey, *Computing Research News*, (March 2006). Available from <http://www.cra.org/statistics>.
3. "A Study of Women Faculty at MIT," *The MIT Faculty Newsletter XI* (4), March 1999.
4. *MIT News*, January 2001, <http://web.mit.edu/newsoffice/nr/2001/gender.html>.
5. National Academy of Sciences, National Academy of Engineering and Institute of Medicine, *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*, 2006.
6. "Accomplished Women: Rita Colwell," *Howard Hughes Medical Institute Bulletin*, June 2002, <http://www.hhmi.org/bulletin/june2002/women/women2.html>.
7. "Accomplished Women: Shirley Tilghman," *Howard Hughes Medical Institute Bulletin*, June 2002, <http://www.hhmi.org/bulletin/june2002/women/women2.html>. ■

CRA-W Anita Borg Early Career Award

Nomination Deadline
February 15, 2007

Details: <http://www.cra.org/Activities/craw/borg>

Who Grants the Most Bachelor's and Doctoral Degrees in CS?

The National Science Foundation's WebCASPAR service (<http://webcaspar.nsf.gov/>) is an excellent resource for education data. For example, below is a list of the 30 institutions that awarded the most bachelor's and master's degrees in computer science in academic year 2003/2004, followed by one for those that awarded the most doctorates in 2004/2005. Additional variables, such as gender, citizenship and ethnicity, can be added to the database queries.

CS Bachelor's Degrees Awarded, 2004

University of Phoenix	2,552
The American College in Atlanta	1,060
DeVry Institute of Tech (Oakbrook Terr, IL)	1,005
Strayer College	993
DeVry Institute of Tech (Cty of Industry, CA)	858
University of Maryland University College	548
University of Maryland Baltimore County	480
DeVry Institute of Tech (Decatur, GA)	462
University of Maryland at College Park	443
University of California-Irvine	388
University of Texas at Austin	367
Rochester Institute of Technology	366
DeVry Institute of Tech (Kansas City, MO)	353
Rutgers the State Univ of NJ New Brunswick	340
Drexel University	337
Georgia Institute of Technology, Main Campus	329
Pennsylvania State U, Main Campus	326
DeVry Institute of Tech (Phoenix, AZ)	324
DeVry Institute of Technology (Unknown City, NJ)	322
Purdue University, Main Campus	321
DeVry Institute of Tech (Columbus, OH)	304
New Jersey Institute Technology	291
CUNY Bernard M Baruch College	290
Rensselaer Polytechnic Institute	283
De Paul University	282
SUNY at Stony Brook, All Campuses	279
San Jose State University	272
Florida State University	271
University of Texas at Dallas	269
DeVry Institute of Tech (Irving, TX)	266

CS Master's Degrees Awarded, 2004

The American College in Atlanta	472
Johns Hopkins University	455
Carnegie Mellon University	416
University of Southern California	360
Pace University New York Campus	328
New Jersey Institute Technology	324
De Paul University	274
Illinois Institute of Technology	273
Syracuse University, Main Campus	256
Boston University	245
Regis University	241
University of Texas at Dallas	234
Golden Gate University	228
University of Maryland University College	212
Strayer College	208
Capitol College	205
University of St Thomas (Saint Paul, MN)	205
George Mason University	190
California State University-Hayward	177
George Washington University	175
Rochester Institute of Technology	173
Lawrence Technological University	172
Stanford University	162
New York University	161
Stevens Institute of Technology	148
North Carolina State University at Raleigh	147
Cornell University, All Campuses	134
University of North Carolina at Charlotte	134
University of Maryland Baltimore County	132
Drexel University	129

CS Doctoral Degrees Awarded, 2005

Massachusetts Institute of Technology	48
Carnegie Mellon University	40
Nova Southeastern University	33
University of California-Berkeley	33
Stanford University	29
University of Illinois at Urbana-Champaign	27
Georgia Institute of Technology, Main Campus	25
George Mason University	23
University of California-Los Angeles	22
University of Washington - Seattle	18
Purdue University, Main Campus	17
University of Maryland at College Park	17
University of North Carolina at Chapel Hill	17
University of Southern California	17
Michigan State University	16
University of Central Florida	16
University of Minnesota - Twin Cities	16
Cornell University, All Campuses	15
University of Maryland Baltimore County	15
University of Michigan at Ann Arbor	15
University of Pittsburgh Main Campus	15
University of Wisconsin-Madison	15
University of California-Santa Barbara	14
University of Texas at Austin	14
New Jersey Institute Technology	13
University of Texas at Dallas	13
Virginia Polytechnic Institute and State Univ	13
Columbia University in the City of New York	12
Princeton University	12
University of California-Davis	12

CRA Welcomes New Staff Member



CRA is pleased to welcome Mackenzie Colbert, who has recently joined the staff as the Meetings Coordinator.

Mackenzie has more than five years experience in the meetings and events industry. While working with the World Wildlife Fund's Climate Change Program in both Washington, DC, and Berlin, she was involved in international planning activities in Europe, Asia, and Africa. She has recently been employed as a Sr. Meeting Planner for BAE Systems, a transatlantic aerospace and defense company in Arlington, Virginia. Mackenzie is a graduate of Texas A&M University with a BS in Psychology.

We are delighted to have Mackenzie on board, and look forward to the contributions she will make to ensure that CRA's workshops and conferences run smoothly. ■

Transitions, Appointments, and Awards

Peter Freeman, assistant director for Computer and Information Science and Engineering (CISE) at the National Science Foundation (NSF), will become a director at the Washington Advisory Group in January 2007. He joined NSF in 2002 from Georgia Tech, where he was founding dean of computing and continues as an emeritus professor. According to NSF Director Arden L. Bement, Jr., "Dr. Freeman's tenure at NSF was filled with many valuable achievements. We appreciate his contributions and leadership over the years and wish him the best in his future endeavors." Dr. Freeman will continue to live in Washington. In addition to consulting, he will remain active in the computing community and with Georgia Tech.

Congratulations to **Michael Schroeder** (Microsoft Research) and **Eugene Spafford** (Purdue University) who were recently awarded top honors from ACM's Special Interest Group on Security, Audit and Control (SIGSAC) for their contributions to research and security policy. For details, see:

http://campus.acm.org/public/pressroom/press_releases/11_2006/sigsac.cfm

The computing community mourns the death of **Ralph Griswold**, a pioneering computer scientist and founder of the CS Department at Arizona State University. Dr. Griswold created the Snobol IV string processing language and then the Icon language. The department has established the Ralph E. Griswold Memorial Endowment to honor his memory. For details, see:

<http://www.cs.arizona.edu/news/articles/200610-memorial.html>

Congratulations to members of the CS/CE community who were recently elected as AAAS Fellows (Information, Computing, and Communication Section) for their contributions to science and technology. They will be recognized at the Fellows Forum during the AAAS Annual Meeting in February: **Susan J. Eggers**, University of Washington; **Ronald Fagin**, IBM Almaden Research Center; **Tio Jiang**, University of California, Riverside; **Michael Jordan**, University of California, Berkeley; **Henry A. Kautz**, University of Rochester; **Vipin Kumar**, University of Minnesota; **Sanjay Ranka**, University of Florida; **Daniel A. Reed**, University of North Carolina, Chapel Hill; **Marc Snir**, University of Illinois, Urbana-Champaign; and **Robert F. Sproull**, Sun Microsystems Laboratories. Reed is CRA's board chair and Snir and Sproull are board members.

AAAI has appointed **Marie desJardins**, CSE Department, University of Maryland, Baltimore County, as its representative on the CRA board of directors, effective December 1, 2006. Professor desJardins succeeds **Tim Finin** of UMBC who has served on the board since 1997. ■

CRA-W Distributed Mentor Program

Undergraduate Summer Research Internships

Student and Mentor Applications Now Open for Summer 2007

Submission Deadline: *February 15, 2007*

See: <http://www.cra.org/Activities/craw/dmp/>

Changes in Science Policy from Page 1

she has already mentioned funding basic research to aid competitiveness as a top priority for her in the new Congress—the failure to pass the appropriations bills in a timely manner means that NSF, NIST, and DOE Office of Science have effectively “lost” much of those proposed increases for FY 07.

While it is clear that the Democratic leadership is generally very supportive of both the ACI and the idea that the country must take steps now to ensure its role as a dominant global competitor in the future, there are distinct differences in approach that will likely manifest themselves now that the majority has shifted. The President’s ACI includes calls for increased funding for research in the physical sciences, mathematics, and computer science, as well as improvements to science and math education efforts, revised worker training and visa policies, and permanent extension of the R&D tax credit. Expect the Democrats to embrace some elements of the President’s plan—such as the research and education pieces—and distance themselves from other elements, such as changes to visa policies that might encourage the recruitment of highly skilled immigrants.

Bart Gordon (D-TN), the new chair of the House Science Committee, provided some evidence of this slight shift in emphasis when he and his senior committee staff briefed a small group of business and academic associations about his committee’s priorities for the coming year. While he embraced the President’s call for increases to NSF’s research budget, he expressed concern that NSF’s education efforts were not receiving comparable attention. He

expected to use his newly named “Subcommittee on Research and Science Education” to make science education a centerpiece of any competitiveness legislation that finds its way through the committee.

Gordon and his staff also focused significant attention on the “workforce side” of competitiveness, indicating that they really want to understand “research and development’s role in job creation and in building a globally competitive workforce.” The committee will be particularly interested in how offshore outsourcing will affect the U.S. workforce—an issue they indicated will be the subject of a number of hearings in the coming year.

One other notable change Gordon said he planned to make to the committee is the reestablishment of an “Investigations and Oversight” subcommittee. This subcommittee would serve as a focal point for the committee’s efforts in uncovering “waste, fraud and abuse” at federal science agencies. It would also provide a forum for investigating the “politicization of science” and policy questions such as the desirability of reconstituting the Congressional Office of Technology Assessment, which was shut down shortly after Republicans assumed the majority in the House in 1994.

Each of these areas—a greater emphasis on NSF’s education efforts, an increased focus on workforce issues like outsourcing, and increased attention to investigations and oversight—represents a change in approach from the Science Committee of the 109th Congress, and could change the way science issues “play” in Congress. Focusing on the reductions to NSF’s Education and

Human Resources directorate may impact planned increases to NSF’s research accounts, for example. Congressional focus on offshore outsourcing will put increased attention on the state of IT R&D and IT education in the new Congress. A focus on the politicization of science could highlight partisanship rather than science—a marked change for the largely bipartisan, nearly-always-unanimous Science Committee. It is unclear whether any of these changes would have a long-term positive or negative effect on the research community.

On the whole, however, members of the science advocacy community appear optimistic about long-term dealings with a Democratic Congress. The Democratic Innovation Agenda is very similar to what became the President’s ACI. Both are heavily influenced by the National Academies’ *Rising Above the Gathering Storm* report, which made specific recommendations for Congress and the Administration on how to protect future U.S. competitiveness. Congressional Democrats might place more emphasis on federal education efforts like NSF EHR and “applied and industrial” R&D (like NIST, the Advanced Technology Program, and Manufacturing Extension Partnership program) than Congressional Republicans have, and may place more emphasis on workforce/offshoring issues. Otherwise, they are likely to share a similar commitment to increasing the research budgets of NSF, NIST, DOE, National Institutes of Health, National Oceanic and Atmospheric Administration, and NASA.

With signs from the Administration indicating another strong

budget request for the science agencies that are the target of ACI for FY 08, the research community will be looking for Congressional Democrats to show the same commitment to fundamental research they showed while in the minority. But first, Congress needs to finish its work for FY 07.

As always, for the latest news and analysis about Congress and the federal budget for computing research, check CRA’s *Computing Research Policy Blog*:

<http://www.cra.org/blog> ■

UPDATE

After CRN went to press, the Democratic congressional leadership announced that they intend to extend the continuing resolution passed as a stopgap for FY 07 from February 15, 2007, through the end of the year. Citing the difficulty of passing both the FY 07 and FY 08 appropriations bills in the same calendar year, Democratic appropriators instead decided on a CR for FY 07 that will eliminate congressional earmarks and fund agencies at FY 06 or lower levels, freeing them to begin work on the FY 08 appropriations process. At this writing, we do not yet know whether the ACI-related increases planned for FY 07 will merit a special exception to the Democrats’ CR plan. See <http://www.cra.org/blog> for the the latest information.

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Inventing the Future from Page 4

take determined and continued work, not just by NSF/CISE but by all the actors in our community—that means you, me, and all of our organizations—working together to realize that potential in practice.

Emphasizing what I noted above, these accomplishments (and others) could not have been achieved without the help of many, many people. I want to thank the CISE administrative staff, the program directors (many of whom have been rotators) and other scientific staff and advisors; those of you who have served on the CISE Advisory Committee; and the hundreds (thousands?) who have attended workshops, sent us thoughtful comments and suggestions, and, of course, responded so well to new programs and activities. The Computing Research Association has been, appropriately, a special partner with CISE. Finally, without the wisdom, advice, insight, good spirits, and just plain hard work of Deborah Crawford, Deputy AD/CISE, none of what I have talked about here would have come about as well as it did.

In closing, let me add a personal note. In many ways, serving as AD/

CISE has been absolutely the best position I have ever had. It has given me the rare opportunity to make a major difference for our community, science, and the entire Nation. It also has been extremely invigorating intellectually, collegially, and just on a workaday basis. Perks like a trip to the South Pole, visits to a number of big science sites, attending interesting functions in official Washington, and the opportunity to play a meaningful role on the international stage only add to the personal rewards. Finally, of course, is the sense of having been able to give back at least as much as the field has given to me.

It has been an honor and a privilege to serve you while at NSF, and I look forward to continuing that service as an active member of the computing community.

From the Editor: CRA is grateful to Peter Freeman for the columns he and CISE staff members have contributed to CRN over the past five years, keeping the community informed of activities at NSF/CISE. Our good wishes go with him as he joins the Washington Advisory Group in January—JS. ■

Avaya Labs Research from Page 1

meeting Avaya's business aspirations/needs through rapid realization of new technologies and solutions. Small realization teams bring together people from Research, the Avaya product units, and other Avaya organizations to speed implementation of technologies from Research.

Collaborative Applications

How will and how should the way people communicate change because of advances in technologies? Our research focuses on what users should and will be able to do, rather than concentrating on specific devices, networks, or incremental technological advances. We are at the brink of a communication revolution where just about everything can change. Even the most familiar aspects of using a telephone—its ringtones, ringbacks, dialtone, busy signals—will soon become obsolete, replaced with presence-enabled systems designed to work in an IP communications world. In this new world nothing needs to be more than just a click away. But what is going to make these endless possibilities and combinations of devices, modalities, and networks comprehensible and usable?

We ask what it would take to go the next step and build systems that connect the right people, at the right time, in the right place, in the right ways. This leads us to build systems to manage presence and location, communication application servers, and solutions for different flavors of mobility. If processes were going to be communication enabled, then we ask what it would take to go the next step and build platforms that would determine the who, where, when, and how of communications in the context of the virtual enterprise, where communication decisions are interdependent, to support the full range of applications: personal communication management, supply chain and management, customer relations, emergency response, and more.

As an example, we built a trial system for a world-renowned hospital to provide hands-free, close-knit communication on demand among the hospital staff, based on presence and location information, wireless communications, and specialized headsets.

Data Analysis

The Data Analysis Research Department pursues data analysis technology that is shaped by important, real-world applications within Avaya. Examples include:

- Assessing and monitoring data networks so that IP telephony (VoIP) is deployed with high quality-of-service.
- Performance analysis and visualization of enterprise workflow.
- Methods for turning customer data into information for customer relationship management.

- On-line analyses of large data sets.
- Algorithms and queuing theory for contact center routing problems.
- Data mining.

Goals include incorporating the best data analysis technology into Avaya's systems, products, and internal use; and publishing papers about this work in the professional literature. Sample problems range from analyzing field data to model the advantages and costs of preventive maintenance for large communications systems, to stochastic modeling of overlay networks to evaluate the behavior of new application-layer path selection strategies.

IP Communications

Early phases of the migration of voice-based telephony to IP networks are largely complete. The next phase of convergence—involving IP-based applications, data networks and devices—promises even greater benefits in business and individual productivity as well as cost savings. Our research addresses the problem of designing and deploying flexible and customizable services over a distributed framework, while also satisfying the need for cohesive and predictable end-to-end communication service behavior. Specifically, we address the problem of designing end-to-end service elements, protocols and software, using technologies such as SIP and XML, and that execute within end-user devices, servers and applications and that may be deployed on networks that are peer-to-peer, fully centralized or hybrids. Specific areas of focus are: a) rich communications user experience for the corporate employees; b) architectures for IP-based end-user devices; c) next-generation customer service communication infrastructure; and d) distributed, multi-domain communications frameworks.

Multimedia Technologies

Consistent with Avaya's commitment to research aimed at sustained competitiveness, Multimedia Technologies targets basic and applied research leading to product differentiation in communications interfaces.

Audio technology areas include:

- conversational interaction using speech, speaker recognition, and speech synthesis;
- language and dialog modeling;
- microphone array technology;
- multi-channel sound projection;
- conferencing and audio mixing technologies;
- acoustic echo cancellation; and
- high-quality audio coding.

Visual technology areas include:

- dynamic system video creation for use in contact center and enterprise communication;
- dynamic mixing of video from

live, automated, and stored material sources; and

- automated "transcoding" of visual information to/from web, video, and mobile device domains.

Platform technology areas include:

- XML-based markup language definition and implementation (e.g., VoiceXML);
- text analysis techniques to facilitate dialog modeling, document summarization, and automated concept extraction; and
- novel uses of text-messaging systems.

Networked Systems

Networked Systems Research focuses on software and systems for enterprise networks, whether wired or wireless. Untethered operation and mobility are the hallmarks of wireless connectivity. Location information is a derivative of these. Our research exploits these characteristics to enhance existing enterprise applications and to develop new ones. Current work covers security, QoS, mobility management, and location-based services in wireless networks. In addition to security techniques carried over from wired networks, we are investigating the use of wireless-specific characteristics for access control, as well as network and transport-layer techniques to augment MAC layer QoS support. Network-layer mobility takes into consideration QoS issues to support converged traffic in the presence of mobility. Work on location-based services looks at applications enabled by location information at different levels of granularity. Current major research topics include:

- Management of converged communication networks and systems.
- VoIP quality assessment of communication infrastructure.
- QoS and security of 802.11 wireless networks.
- Layer 2/3 device and topology discovery.
- Software infrastructure for converged applications.
- Software implemented fault tolerance and rejuvenation.
- Protection against security attacks.

Software Technology

With the best software technology, Avaya can build better and cheaper systems more quickly, and lead the way into the communication future. We must be able to quickly and accurately understand what is needed, what software will satisfy the needs, and what it will take to build it. To that end, we invent tools, languages, components, and ways of organizing, talking about, and specifying software systems that will simplify the job of understanding and building them.

Central questions for software engineers are how to create software designs that are performance-efficient, that can easily evolve over time, and that enable rapid production of products and services. Accordingly, our interests include software families and product lines, architecture, design for change, measurement, precise specification, testing, collaborative, protocol-based applications, notification and response technology, databases, directories, service-oriented architectures, and technology transfer.

An overriding concern in all of these areas is how to measure the impact of new technology when it is introduced. Typical measures range from in-process development fault rates, to predicted resource needs for maintenance after product delivery, to customer-perceived quality as measured by failure rates within fixed time intervals, to product delivery times and schedule slippages when using iterative processes. Using the goal-question-metric paradigm, we suit the measure to the goal of introducing the technology.

We number about 60 people; about 60 percent have a Ph.D. Our researchers are stimulated by seeing their ideas accepted, acknowledged, and put into practice. Avaya Labs Research provides an environment that encourages just such stimulation.

Ravi Sethi is President of Avaya Labs. David Weiss is Director of Software Technology Research and Jon Bentley is a Research Scientist, both at Avaya Labs Research.

This article is another in a series of CRN articles describing the activities of CRA's laboratory members. Previous articles are posted at: <http://www.cra.org/reports/labs>. ■

Two Conferences Co-Locate in 2007 in Orlando, Florida

Richard Tapia Diversity in Computing
October 14 through 17, 2007
<http://www.ncsa.uiuc.edu/Conferences/Tapia2005/>

Grace Hopper Celebration of Women in Computing
"I Invent the Future - GHC 2007"
October 17 through 20, 2007
<http://www.gracehopper.org/>

Professional Opportunities

CRN Advertising Policy

See <http://www.cra.org/main/cra.jobshow.html>

Biotechnology High Performance Computing Software Applications Institute (BHSI) Bioinformatics Cell (BIC) Henry M. Jackson Foundation Scientist, Postdoctoral, and Technical Staff Positions

Scientist, Postdoctoral, and Technical Staff Positions are available to support the Biotechnology High Performance Computing Software Applications Institute and the Bioinformatics Cell in Frederick, Maryland. Applicants should have a Ph.D. in computational biology/chemistry, computer science, or related discipline, and be interested in pursuing research in the development of computational tools to support life science research, such as in bioinformatics, computational biology/chemistry, physiological modeling and systems biology. In particular, algorithms and analysis tools for machine-learning, data mining, sequence comparison, microarray analysis, and statistical pattern recognition, need to be developed to provide insight and analysis of physiologic, genomic and proteomic data.

Background and/or experience in high performance computing and development of analysis tools for bioscience applications are desirable but not essential. The scientist will work in an interdisciplinary environment and in close collaboration with life scientists and other physical scientists.

Contact: Jaques Reifman, Ph.D.
Email address: jreifman@bioanalysis.org
Telephone: 301-619-7915
Fax-number: 301-619-1983

Boston College Computer Science Department Assistant Professorship

The Computer Science Department at Boston College invites applications for an Assistant Professorship in Computer Science. We will consider applications with research interests in all areas of Computer Science. The successful candidate will be expected to maintain active research and teaching programs.

Applicants should prepare a curriculum vitae, a statement of present and future research plans as well as a teaching statement. Applicants should also request three letters of reference. The preferred method of submission is to send the documents as email attachments to faculty-search@cs.bc.edu. Letters of reference may also be sent via email. Applicants who prefer to submit hardcopy should send the materials to:

Faculty Search
Computer Science Department
Boston College
140 Commonwealth Avenue
Chestnut Hill, MA 02467

This appointment will begin on or after July 1, 2007. Applications should be received by February 1 to assure full consideration. Review of applications will continue until the position is filled.

Boston College is an affirmative action, equal opportunity employer. Minority group members are especially encouraged to apply.

Boston University Department of Computer Science Assistant Professor

Applications are invited for a tenure-track assistant professorship beginning September 2007. Qualifications required of all applicants include a Ph.D. in Computer Science or related discipline, a strong research record, and a commitment to teaching. All research areas of Computer Science will be considered. Particular attention will be given to candidates pursuing research that involves the building of systems (for example operating systems, distributed systems) and/or the management and analysis of data.

Currently, the department consists of 17 faculty members, and offers programs leading to B.A., M.A., and Ph.D. degrees. In recent years the department has expanded in research strength with current research interests including databases, fault-tolerant computing,

image and video computing, network protocols and services, operating systems, performance evaluation, programming languages, real-time systems, security, and theory of computation and algorithms. In addition, our department maintains a close association with other university groups working on various applied computing areas including scientific computing, computer engineering, and bioinformatics.

The department maintains a state-of-the-art computing environment and has full access to the university's supercomputing facilities, high-speed campus networks, and Internet2. Recently, the department has received significant government and industry grants for research, research infrastructure, and for graduate student support. We anticipate that this period of growth will continue based on our recent successes and the continued strong support of the University.

The department particularly encourages applications from women. Additional information on the department and this search is available from <http://www.cs.bu.edu>.

Qualified applicants should apply by filling out the application form available at: <http://www2.cs.bu.edu/faculty-app/> or by sending their resume, a cover letter stating one's areas of specialization, and at least three letters of recommendation to:

Faculty Search Committee
Computer Science Department
111 Cummington Street
Boston University
Boston, MA 02215

University is an Equal Opportunity/Affirmative Action employer.

Brown University Center for Computational Molecular Biology Faculty Position

Brown University seeks highly qualified candidates for one open rank, tenure-track or tenured faculty position with a preference for assistant professor in the Center for Computational Molecular Biology (CCMB). The growing CCMB currently has four full-time faculty members, two in Computer Science, one in Applied Mathematics and one in Biology. Candidates are sought in all areas of computational biology and bioinformatics, particularly those who specialize in research areas complementary to and synergistic with those of current faculty. The research areas of the current Center faculty are: algorithmic methods and statistical inference in genomics, comparative genomics and evolution, gene regulatory networks, regulatory genomics, mathematical models of genetic variation, and cancer genomics.

The successful applicant will be expected to have a demonstrated potential for excellence in research and have outstanding teaching skills. Junior faculty applicants should show the potential to establish an externally funded research program; senior faculty applicants should have established such a program. The appointee will participate in the continuing development of Brown's established undergraduate Computational Biology curriculum and a newer graduate curriculum built upon the foundation of Brown's widely recognized record of teaching innovation and academic excellence. The appointee will have the opportunity to participate in several interdisciplinary projects, including collaborations with faculty in the Center for Genomics and Proteomics, the Center for Cardiovascular Research and other multidisciplinary programs at Brown and affiliated hospitals. The appointment will be in one of the following top-ranked departments: Division of Applied Mathematics, Department of Computer Science, or Division of Biology and Medicine.

Applicants should submit curriculum vitae, representative preprints or reprints, and their research and teaching plans with emphasis on their interdisciplinary expertise. Additionally, candidates for Assistant Professor should arrange to have at least three letters of recommendation sent directly to the contact

address. Candidates for Associate or Full Professor should provide names and contact information for at least five references, who will be contacted for letters of recommendation by the search committee at an appropriate time. All applications will be treated confidentially.

Application review will commence on December 18, 2006 and continue until the position is filled. All documents should be sent electronically in PDF to:

ccmbfs@cs.brown.edu

In addition, please send the cover letter and letters of recommendation to:

Sorin Istrail, Chair
CCMB Search Committee
Center for Computational Molecular Biology
Brown University
Box 1910, 115 Waterman Street
Providence, RI 02912

Brown University is an affirmative action/equal opportunity employer. Women and minorities are encouraged to apply. For further information, see <http://www.brown.edu/Research/CCMB>.

Bucknell University Department of Computer Science Assistant Professor

Applications are invited for a tenure-track entry-level assistant professor position in computer science beginning mid-August 2007. Candidates must have completed their Ph.D. in computer science or a closely related field by August 15th, 2007. A commitment to excellence in teaching and research is required. Preferred areas include computer architecture, programming languages, computer graphics, artificial intelligence, and databases.

Bucknell is a highly selective private undergraduate institution. The B.S. programs are ABET and CAC accredited. The computing environment is Linux/Unix based. More information about the department can be found at <http://www.bucknell.edu/ComputerScience/>

Applications will be considered as received and recruiting will continue until the position is filled. Candidates are asked to submit a cover letter, CV, graduate transcript, a statement of teaching philosophy and research interests, and the contact information for three references. To apply please start at:

<http://jobs.bucknell.edu/> and search for the computer science position.

Please direct any questions to Professor Xiannong Meng of the Computer Science Department at: xmeng@bucknell.edu.

Bucknell encourages applications from women and members of minority groups. (EEO/AA)

Butler University Department of Computer Science & Software Engineering Full-time Lecturer

The Department of Computer Science and Software Engineering at Butler University (www.butler.edu/csse) invites applications for a one-year full-time lecturer position starting in August 2007. Applicants are expected to have at least a master's degree, or the equivalent, in Computer Science, and a strong commitment to teaching.

For details, please see <http://www.butler.edu/cs/advert.asp>.

Butler is an equal opportunity educator and employer, and women and minorities are particularly sought.

California Institute of Technology Computer Science Tenure-Track Faculty Position

The Caltech Computer Science Department invites applicants for a tenure-track faculty position. Our department is a unique environment where innovative, foundational research is conducted in a collegial atmosphere. Our small size facilitates close working relationships among faculty and students, and fosters novel interdisciplinary research in the foundations of Computer Science. We are thus looking for candidates who have demonstrated

exceptional promise through innovative research in computer science with connections to other mathematical, natural, and engineering sciences. A strong commitment to high-quality teaching and mentoring is also expected.

The initial appointment at the assistant-professor level is for four years and is contingent upon the completion of the Ph.D. degree in Computer Science or a related field.

Exceptionally well-qualified applicants may also be considered at the associate or full professor level. Candidates are directed to our web pages at:

<http://www.cs.caltech.edu/search> for instructions on how to apply on-line. Applications will be evaluated until the position is filled. Electronic copies in PDF format of a curriculum vitae (including a list of publications), brief statements of research and teaching interests along with three references are required.

Questions about the application process may be directed to: search@cs.caltech.edu.

Caltech is an Equal Opportunity/Affirmative Action Employer. Women, minorities, veterans, and disabled persons are encouraged to apply.

Carnegie Mellon University School of Computer Science Faculty Positions

The Robotics Institute at Carnegie Mellon University invites applications from outstanding faculty candidates at all levels and in all tracks (tenure-track, research, and systems) with special interest in the areas of:

- Activity Recognition
- Sensing: skin, tactile, auditory, accelerometers, multimodal
- Computer Vision
- Systems Engineering
- Control, Dynamics and Modeling, Non-linear Control
- Mechanical Design and Biomorphic Engineering
- Underwater, Space, and Medical Robotics
- Computer Graphics
- Haptics
- Intelligent Prosthetics

Outstanding candidates in other areas are also welcomed.

Applications should include a letter indicating the area of specialization, a detailed curriculum vitae, statement of current and future research and teaching directions (if appropriate for the track), copies of 1-3 representative papers, and the names and email addresses of three or more individuals who have been asked to provide letters of reference. Applicants should arrange for reference letters to be sent directly to the Faculty Search Committee (hard copy or email), to arrive before January 15, 2007. Letters will not be requested directly by the Search Committee. All applications should indicate citizenship and, in the case of non-US citizens, current visa status.

Beginning November 1, 2006, applications and reference letters may be submitted via email (pdf format) to:

faculty-search@cs.cmu.edu

or to:
Faculty Search Committee
Attention: Sharon Burks
School of Computer Science
Carnegie Mellon University
5000 Forbes Avenue
Pittsburgh, PA 15213-3891

Evaluation of applications will start in November 2006 but applications through February 2007 will also be considered.

Chapman University Department of Mathematics and Computer Science Chair, Full or Associate Professor with Tenure

Chapman University, a comprehensive liberal arts university in southern California, seeks a chair for the Department of Mathematics and Computer Science. The department offers B.S. degrees in Mathematics, Computer Science and Computer Information Systems.

Requirements include a Ph.D. in Computer Science or Mathematics, significant academic administrative experience, a distinguished record of high quality research and publication, and evidence of strong commitment to undergraduate teaching in a liberal arts setting, commensurate with rank of tenured professor.

(continued)

Professional Opportunities

Salary is highly competitive and commensurate with professional experience and qualifications.

For additional information see
<http://www.chapman.edu/mathCSsearch>.

Colby College Computer Science Full-time Tenure-Track Assistant Professor Position

Full-time tenure-track position, assistant professor, starting September 2007.

Review of applications will begin January 15, 2007.

For more information, see:
<http://www.cs.colby.edu/jobs/>

Colgate University Department of Computer Science Associate or Full Professor

Colgate University invites applications and nominations for a position at the rank of Associate or Full Professor starting in August 2007. Applicants are sought in all areas of computer science. Candidates are expected to have a successful record in both teaching and research, and be committed to involvement in departmental and university-wide service. The successful applicant will provide leadership in their areas of expertise, will help staff other department courses, and be encouraged to participate in all-university programs. The teaching load is equivalent to five courses per year which includes credit for laboratory instruction. Salary and benefits are highly competitive.

Colgate University is a highly-selective liberal arts college of 2700 students situated in a picturesque village in central New York. The university is committed to promoting excellence in both teaching and research. Within the university's curricular structure there are opportunities for interdisciplinary collaboration across departments, particularly within the Division of Natural Sciences and Mathematics. Department facilities include three computer laboratories, a recently acquired 20-processor Linux computing cluster, and a newly constructed faculty/student research facility.

Review of applications will begin February 1 and continue until the position is filled. Résumés and three letters of recommendation should be sent to:

Philip Mulry, Chair
 Department of Computer Science
 Colgate University
 13 Oak Drive
 Hamilton, NY 13346

Colgate University is an equal opportunity/affirmative action employer. Developing and sustaining a diverse faculty and staff further the University's academic mission.

Colgate University Department of Computer Science Tenure-Stream Position

Colgate University invites applications for a tenure-stream position at the rank of Assistant Professor starting in August 2007. A Ph.D. or equivalent, and strong interest in both teaching and research are expected. Applicants are sought in all areas of computer science, including (but not limited to) Algorithms, Data Mining, Graphics, Networking, and Operating Systems. Successful applicants will help staff other department courses and be encouraged to participate in all-university programs. The teaching load is equivalent to five courses per year which includes credit for laboratory instruction. Salary and benefits are very competitive.

Colgate University is a highly-selective liberal arts college of 2700 students situated in a picturesque village in central New York. The university is committed to promoting excellence in both teaching and research. Within the university's curricular structure there are opportunities for interdisciplinary collaboration across departments, particularly within the Division of Natural Sciences and Mathematics. Department facilities include three computer laboratories, a recently acquired 20-processor Linux computing cluster, and a newly constructed faculty/student research facility.

Review of applications will begin February 1 and will continue until the position is filled. Résumés and three letters of recommendation should be sent to:

Philip Mulry, Chair
 Department of Computer Science
 Colgate University
 13 Oak Drive
 Hamilton, NY 13346

Colgate University is an equal opportunity/affirmative action employer. Developing and sustaining a diverse faculty and staff further the University's academic mission.

Columbia University Department of Computer Science Tenure-Track Positions

The Department of Computer Science is seeking applicants for two tenure-track positions at either the junior or senior level, one each in computer engineering and software systems. Applicants should have a Ph.D. in a relevant field, and have demonstrated excellence in research and the potential for leadership in the field. Senior applicants should also have demonstrated excellence in teaching and continued strong leadership in research.

Our department of 32 tenure-track faculty and 2 lecturers attracts excellent Ph.D. students, virtually all of whom are fully supported by research grants. The department has close ties to the nearby research laboratories of AT&T, IBM (T.J. Watson), Lucent, NEC, Siemens, Telcordia Technologies and Verizon, as well as to a number of major companies including financial companies of Wall Street. Columbia University is one of the leading research universities in the United States, and New York City is one of the cultural, financial, and communications capitals of the world. Columbia's tree-lined campus is located in Morningside Heights on the Upper West Side.

Applicants should submit summaries of research and teaching interests, CV, email address, and the names and email addresses of at least three references by filing an online application at:

<http://www.cs.columbia.edu/recruit>.
 Review of applications will begin on January 1, 2007.

Columbia University is an Equal Opportunity/Affirmative Action Employer. We encourage applications from women and minorities.

Duke University Department of Computer Science Faculty Positions

We invite applications and nominations for three open-rank faculty positions in the Department of Computer Science at Duke University, to start August 2007. The department is committed to increasing the diversity of its faculty. Although we are interested in strong candidates in all active research areas of computer science, the department's priorities are in the following areas: Data analysis, including machine learning, medical imaging, etc. Systems and architecture, including networks, databases, security, etc.

A successful candidate must have a solid disciplinary foundation and demonstrate promise of outstanding scholarship in every respect, including research and teaching. Please refer to www.cs.duke.edu for information about the department.

Applications should be submitted online at www.cs.duke.edu/facsearch.

They should include a curriculum vitae, a list of publications, and copies of the most important publications. A Ph.D. in computer science or related area is required. Assistant Professor applicants should arrange for three to five letters of reference to be sent preferably via email:

facsearch@cs.duke.edu
 to the Faculty Search Chair. Senior candidates should provide the names and contact information of three to five potential references. To guarantee full consideration, applications and letters of reference should be received by January 8, 2007.

Duke University is an affirmative action, equal opportunity employer.

Florida International University School of Computing and Information Sciences Faculty Positions

Applications are invited for multiple tenure-track or tenured faculty positions at the levels of Assistant, Associate, or Full Professor. A Ph.D. in Computer Science or a related area is required. Outstanding candidates are sought in areas of Grid and High-Performance

Computing, Communications and Networking, Computer Security, Bioinformatics, and Data Mining. Exceptional candidates in other areas will be considered as well. Candidates with the ability to forge interdisciplinary collaborations will be favored. Candidates for senior positions must have a proven record of excellence in research funding, publications, teaching and mentorship, and professional service, as well as a demonstrated ability for developing and leading collaborative research projects. Outstanding candidates for the senior positions will be considered for the endowed Ryder Professorship position. Successful candidates are expected to develop a high-quality funded research program and must be committed to excellence in teaching at both the graduate and the undergraduate levels.

Florida International University (FIU), the state university of Florida in Miami, is ranked by the Carnegie Foundation as a comprehensive doctoral research university with high research activity. FIU offers over 190 baccalaureate, masters and doctoral degree programs in 19 colleges and schools. With over 38,000 students, it is one of the 20 largest universities in the United States, and boasts a new and accredited Law School and the newly created Herbert Wertheim College of Medicine, which will open its doors to the inaugural class in Fall 2008. US News & World Report has ranked FIU among the top 100 public universities, and Kiplinger's Personal Finance magazine ranked FIU among the best values in public higher education in the country in their 2006 survey.

The School of Computing and Information Sciences (SCIS) is a designated and rapidly growing program of excellence at the University and enjoys strong support of the University administration. The School has 29 faculty members (including six new tenure-track faculty members hired in the last three years), 1,200 students, and offers B.S., M.S., and Ph.D. degrees in Computer Science and B.S. and B.A. degrees in Information Technology. Its undergraduate program is the largest among the ten state universities in Florida and SCIS is the largest producer of Hispanic CS and IT graduates in the US. The Ph.D. enrollment in the School has doubled in the last four years.

The School attracts an average of \$2.5M annually in competitive external research funding, plus an additional \$2.5M of in-kind grants and donations. Its research is sponsored by NSF, NASA, ARO, NIH, ONR, NOAA, and other agencies. In the last two years, faculty members have received the prestigious NSF CAREER AWARD, DoE CAREER AWARD, and IBM Faculty Research Awards. SCIS has established broad and dynamic partnerships with industry. The School's research groups include the NSF CREST Center for Emerging Technologies for Advanced Information Processing and High-Confidence Systems, the High Performance Database Research Center, the Center for Advanced Distributed Systems Engineering, the Center for Autonomic and Grid Computing sponsored by IBM, the Distributed Multimedia Information Systems Laboratory, and the Bioinformatics Research Group.

The SCIS has excellent computing infrastructure and technology support. In addition, the SCIS faculty and students have access to the grid computing infrastructure with 1000 nodes under the Latin American Grid (LA Grid) initiative (<http://lagrid.fiu.edu>), a first ever comprehensive international partnership linking institutions in the US, Latin America, and Spain for collaborative research, education, and innovation initiated by IBM and FIU.

Applications, including a letter of interest, contact information, curriculum vitae, and the names of at least three references, should be sent to:

Chair of Recruitment Committee
 School of Computing and Information Sciences
 Florida International University
 University Park
 Miami, FL 33199

E-mail submission to recruit@cis.fiu.edu is preferred. The application review process will begin on January 16, 2007, and will continue until the positions are filled. Further information can be obtained from the School website <http://www.cis.fiu.edu>, or by e-mail to recruit@cis.fiu.edu.

Florida International University is a member of the State University System of Florida and is an equal opportunity/affirmative action/equal access employer.

Florida State University Department of Computer Science Tenure-Track Assistant Professor Positions

The Department of Computer Science invites applications for multiple tenure-track positions at the Assistant Professor rank. Areas of preference are databases, computer systems and computer vision; strong applicants with expertise in other areas will also be considered. Applicants should hold a PhD in Computer Science or a closely related field, and have excellent research and teaching accomplishments / potential. The department offers degrees at the BS, MS, and PhD levels.

FSU is classified as a Carnegie Research I university. Its primary role is to serve as a center for advanced graduate and professional studies while emphasizing research and providing excellence in undergraduate education. The department will be experiencing significant growth over the next few years with multiple additional positions available. Further information can be found at

<http://www.cs.fsu.edu>.
 FSU is located in the beautiful and picturesque Florida capital — a city of approximately 250,000, about an hour's drive from the Gulf Coast. Screening will begin January 1, 2007 and will continue until the positions are filled. Please use the on-line application form at:
<http://www.cs.fsu.edu/positions/apply.html>.
 Questions can be e-mailed to recruitment@cs.fsu.edu.

The Florida State University is an Equal Opportunity/Affirmative Action employer, committed to diversity in hiring.

Franklin & Marshall College Department of Mathematics Professor

Franklin & Marshall College invites applications for a senior level tenure-track position in Computer Science, beginning Fall 2007.

The successful candidate will be an experienced academic with a Ph.D. in Computer Science, whose scholarly record and demonstrated interest in collaboration with colleagues from other disciplines merit appointment at the rank of Associate Professor. We will also consider an outstanding candidate at the rank of Assistant Professor.

While initial appointment will be in the Department of Mathematics, the College is committed to forming a new department of Computer Science. The successful candidate will be expected to help design and implement a new computer science major. Preference will be given to candidates who can lead this transition and serve as the first Chair of the Department of Computer Science. Our teaching load is 3/2 and includes participation in the College's general education requirement, "Foundations," and/or our First-Year Seminar program. Salary will be competitive with computer science salaries at other liberal arts institutions.

Candidates should submit the following to:
 Wendell Ressler, Chair
 Computer Science Search Committee
 Franklin & Marshall College
 P.O. Box 3003
 Lancaster, PA 17604-3003

- a letter of application
- a curriculum vitae
- teaching and research statements
- a graduate transcript and
- three letters of recommendation, including at least one that addresses the applicant's teaching ability.

We will not accept electronic versions of application materials. Completed applications received by January 8, 2007, are guaranteed full consideration, although review of applications will continue until the position is filled. Direct any questions to Wendell Ressler at wendell.ressler@fandm.edu or 717-291-3878.

Franklin & Marshall College is a highly selective liberal arts college located in Lancaster, Pennsylvania, about one and a half hours from both Philadelphia and Baltimore. For more information about the College, see our web site at www.fandm.edu. Franklin & Marshall College has a demonstrated commitment to cultural pluralism through the hiring of women and minorities. EOE.

Professional Opportunities

George Mason University Dept. of Computer Science and Dept. of Information & Software Engineering *Tenure-Track Positions*

The Department of Computer Science (CS) and the Department of Information and Software Engineering (ISE) at George Mason University invite applications for two tenure-track positions at the rank of Assistant Professor beginning Fall 2007. The two departments reside in the Volgenau School of Information Technology and Engineering.

We are seeking faculty members who can establish strong research and teaching programs. We are particularly interested in applicants in the areas of software engineering, theoretical computer science and cryptography. Outstanding candidates in other research areas, including computer gaming, computational biology and bioinformatics, and knowledge engineering, will also be considered. Minimum qualifications include a Ph.D. in Computer Science, Information Systems, Software Engineering, or a closely related field, demonstrated potential for excellence and productivity in research, and a commitment to high quality teaching.

Our research interests include artificial intelligence, algorithms, computer graphics, computer vision, databases, data mining, image processing, information and network security, knowledge engineering, parallel and distributed systems, performance evaluation, real-time systems, robotics, software engineering, visualization, and wireless and mobile computing.

The School has more than 100 full-time faculty members, with 24 in CS and 16 in ISE. The two departments offer B.S. programs in Computer Science and Applied Computer Science, four separate M.S. programs in Computer Science, Information Security and Assurance, Information Systems, and Software Engineering, as well as several Graduate Certificate programs. The departments jointly offer a Ph.D. degree in Computer Science and participate in a Ph.D. program in Information Technology with concentrations in Information Security and Assurance, Information Systems, and Software Engineering.

George Mason is a young, innovative, and vibrant university of 30,000 students. Located near the Nation's capital, Northern Virginia is a great place to live with a thriving high-tech information technology industry and frequent world-class cultural events. There are great opportunities to work with established groups in industry and government. The public school systems are among the best in the nation. For more information visit our Web sites:

<http://cs.gmu.edu/> and <http://ise.gmu.edu/>.

For full consideration please submit application and application materials on-line at:

<http://jobs.gmu.edu> (position number F8955Z)

To apply online you will need a statement of professional goals including your perspective on teaching and research, a complete C.V. with publications, and the names of four references.

The review of applications will begin on December 1, 2006 and will continue until the positions are filled.

GMU is an equal opportunity/affirmative action employer. Women and minorities strongly encouraged.

George Washington University Department of Computer Science *Non-Tenure-Track Faculty Position*

The Department of Computer Science is seeking qualified applicants for a full-time non-tenure-track faculty position. The position focuses chiefly on undergraduate education, involving teaching, curriculum development, and student relations. The position requires a doctoral degree in Computer Science or a closely related field, and recent evidence of proficiency or potential in undergraduate education.

The George Washington University is a private university that prides itself on a quality undergraduate experience, low student-teacher ratio, and excellent research programs. Located in the heart of the Nation's capital, GW affords its faculty and students unique cultural and intellectual opportunities.

The Department of Computer Science offers an accredited Bachelor of Science program, a Bachelor of Arts program in

Computer Science, and graduate degree programs at the Master's and Doctoral level. The Department currently has 19 full-time faculty members, numerous affiliated and adjunct faculty members, 140 undergraduates, over 240 master's students, and 100 doctoral students. For further information please refer to <http://www.cs.gwu.edu>.

Review of applications will begin January 15, 2007, and will continue, possibly through the Spring, until the position is filled. Applicants should send curriculum vitae and a statement of teaching interests, and should arrange for three reference letters to be sent to us. At least one of the letters should address teaching experience or potential.

These and other relevant supporting materials should be sent to:

Chair
Computer Science Search Committee
Department of Computer Science/
PHIL 703
George Washington University
Washington D.C. 20052

Only complete applications will be considered.

The George Washington University is an equal opportunity/affirmative action employer.

Georgetown University Department of Computer Science *Visiting Assistant Professor*

The Department of Computer Science at Georgetown University seeks exceptional candidates for two visiting positions at the level of assistant professor. These are two-year positions, and we anticipate hiring tenure-track faculty in the future. We are particularly interested in candidates in security, data mining, data warehousing, and software engineering, although we will consider exceptional applicants in other areas. Prospective candidates must have a Ph.D. in computer science by August of 2007.

The Department offers BA and BS degrees and recently gained approval to start a Master's program in the Fall of 2007. We will propose a doctoral program in the future. The Department is known for its inclusive, collegial

atmosphere that promotes a high degree of interaction between the faculty and students. For more information about the Department, please visit our Web site:

<http://www.cs.georgetown.edu>.

Georgetown University, founded in 1789, is the nation's oldest Catholic, Jesuit institution, rich in tradition and strongly focused on academic community, social justice, and the education of the whole person. Located in Washington, DC, the University is in the heart of a vibrant technology industry and in close proximity to government agencies and laboratories. Washington is a diverse city with diplomatic corps, the new Nationals baseball team, and unique cultural institutions, such as the Kennedy Center and the Smithsonian. Bike trails span the city and surrounding area. The Potomac River is ideal for boating at all levels. The Atlantic Ocean, the Chesapeake Bay, and Skyline Drive in the Shenandoah National Park are easy drives from Georgetown.

For full consideration, we should receive complete applications by January 15, 2007, but we will accept applications until filling both positions. The Department encourages applications from women and members of underrepresented groups. Georgetown University enjoys a diverse community and is an equal-opportunity and affirmative-action employer.

To apply, prospective applicants must submit a curriculum vitae, research and teaching statements, and names of at least three references. Applicants should arrange to have letters of recommendation sent directly to the Department.

Electronic applications and supporting documents are strongly encouraged and may be sent by e-mail to:

faculty-recruiting@cs.georgetown.edu.

Paper applications and supporting documents may be sent to:

Chair of Faculty
Recruiting Department of Computer
Science
301A St. Mary's Hall
Georgetown University
Washington, DC 20057-1232

Max Planck Institute for Software Systems

Tenure-track openings

Applications are invited for tenure-track and tenured positions in all areas related to the design, analysis and engineering of software systems, including programming languages, formal methods, security, distributed, networked and embedded systems, databases and information systems, and human-computer interaction. A doctoral degree in computer science or related areas and an outstanding research record are required. Successful candidates are expected to build a team and pursue a highly visible research agenda, both independently and in collaboration with other groups. Senior candidates must have demonstrated leadership abilities and recognized international stature.

The institute offers a unique environment that combines the best aspects of a university department and a research laboratory:

- Successful candidates receive generous base funding to build and lead a team of graduate students and post-docs. They enjoy full academic freedom and publish their research results freely.
- They have the opportunity to teach courses and supervise doctoral students, and have the flexibility to incorporate teaching into their research agenda.
- They are provided with outstanding technical and administrative support facilities as well as internationally competitive compensation packages.

Over the next 5-10 years, the institute is scheduled to grow to a strength of up to 17 tenured and tenure-track researchers, and about 80 doctoral and post-doctoral positions. Additional growth is expected through outside funding. We maintain an open, international and diverse work environment and seek applications from outstanding researchers regardless of national origin or citizenship. The working language is English; knowledge of the German language is not required for a successful career at the institute.

The institute's locations in Kaiserslautern and Saarbruecken, Germany, offer a high standard of living, numerous cultural attractions and beautiful surroundings in the center of Europe, as well as a stimulating, competitive and collaborative work environment. In immediate proximity are the MPI for Informatics, Saarland University, the Technical University Kaiserslautern, the German Center for Artificial Intelligence (DFKI), and the Fraunhofer Institutes for Experimental Software Engineering and for Industrial Mathematics.

Qualified candidates should apply online at <http://www.mpi-sws.org/application>.

The review of applications will begin on Januar 2, 2007. Applicants are strongly encouraged to submit applications by this date; however, applications will continue to be accepted until February 1, 2007.

The Max Planck Society is committed to increasing the representation of women and people with physical disabilities in Computer Science. We particularly encourage such individuals to apply.



The recently founded MPI for Software Systems joins a network of over eighty Max Planck Institutes, Germany's premier basic research facilities with an established record of world-class, foundational research in the fields of medicine, biology, chemistry, physics, technology and humanities. Since 1948, MPI researchers have won 16 Nobel prizes, which testifies to the quality and innovation of MPI research programs. The new institute aspires to meet the highest standards of excellence and international recognition in its research in software systems.



MAX-PLANCK-GESELLSCHAFT

Professional Opportunities

Georgia Institute of Technology Computing Science and Systems (CSS) Division

Faculty Positions

The Computing Science and Systems (CSS) Division within the College of Computing at the Georgia Institute of Technology invites applications for tenure-track faculty positions. Applications at all levels of service will be considered. Applicants must have an outstanding record of research, a sincere commitment to teaching, and interest in engaging in substantive interdisciplinary research. Excellent applications in all areas of computer science with the division's scope are invited. You can find more information about the division at <http://www.cc.gatech.edu/css>.

Reviews of submitted applications begin December 15, 2006. Full consideration will be given to those who apply by January 15, 2007.

The full position announcement and information on how to apply can be found at:

[http://www.cc.gatech.edu/component/
option=com_jobline/Itemid,514](http://www.cc.gatech.edu/component?option=com_jobline/Itemid,514).

Georgia Institute of Technology Interactive and Intelligent Computing (IIC) Division

Faculty Positions

The Interactive and Intelligent Computing (IIC) Division within the College of Computing at the Georgia Institute of Technology invites applications for tenure-track faculty positions. Applications at all levels of service will be considered. Applicants must have an outstanding record of research, a sincere commitment to teaching, and interest in engaging in substantive interdisciplinary research. Research areas of particular interest include robotics, games and Game AI, entertainment and digital media, CS education, graphics and animation, social networks, visualization, and music computation.

Reviews of submitted applications begin December 15, 2006. Full consideration will be given to those who apply by January 15, 2007.

The full position announcement and information on how to apply can be found at:

[http://www.cc.gatech.edu/component/
option=com_jobline/Itemid,514](http://www.cc.gatech.edu/component?option=com_jobline/Itemid,514).

Georgia Institute of Technology College of Computing Computational Science and Engineering Division

Faculty Positions

The Computational Science and Engineering division within the College of Computing at the Georgia Institute of Technology invites applications for tenure-track faculty positions. Applications at all levels of service will be considered. Applicants

must have an outstanding record of research, a sincere commitment to teaching, and interest in engaging in substantive interdisciplinary research with collaborators in other disciplines. Candidates with demonstrated expertise in high-performance computing (HPC) in support of applications from biology or other areas of science and engineering are encouraged to apply.

Reviews of submitted applications begin December 15, 2006. We expect most hiring decisions will be made by May 1, 2007. We strongly encourage application cover letters and materials be submitted online by going to:

<http://www.cc.gatech.edu/recruiting/>
or by e-mail to:

recruiting@cc.gatech.edu

If done by email, the cover letter must include a URL pointing to application materials in PDF. The application material should include a full academic CV, teaching and research statements, a list of at least three references and up to three publications. Applicants are encouraged to clearly identify in their cover letter the area(s) that best describe their research interests.

Georgia Tech is an Affirmative Action/Equal Opportunity Employer. Applications from women and under-represented minorities are strongly encouraged.

Georgia Southern University Department of Computer Sciences Yamacraw Assistant Professor

Yamacraw tenure-track position in Computer Sciences at the Asst. Professor level to begin Fall 2007.

For full text advertisement, including all qualifications, application instructions, and information about the department and faculty, see:

<http://cit.georgiasouthern.edu/cs/>.

Georgia is an Open Records state.

Georgia Southern University is an AA/EO institution. Individuals who need reasonable accommodations under the ADA in order to participate in the search process should contact the Associate Provost.

Georgia State University Department of Computer Science Tenure-Track Position

The Department of Computer Science of Georgia State University invites applications for an anticipated tenure-track position for assistant/associate professor beginning the Fall semester, 2007. Earned Ph.D. in Computer Science, or a closely related discipline, and an excellent record of publications in computer science are required with preference for extramural funding. Preference is for individual

with specialty in networking, bioinformatics or operating systems.

Georgia State University, founded in 1913, is a Carnegie Doctoral/Research Extensive university. Located in the heart of downtown Atlanta, this major research university has an enrollment of more than 27,000 undergraduate and graduate students in six colleges. Georgia State is the second largest university in the state, with students coming from every county in Georgia, every state in the nation and from over 145 countries. Georgia State University is currently embarking on a record \$1 billion campus expansion.

The Computer Science Department offers programs leading to the B.S., M.S., and Ph.D. degrees in computer science. Currently, more than 60 PhD students are enrolled. Departmental computing facilities for research and instruction include a departmental network of PCs, Unix/Linux workstations, two interconnected Beowulf clusters, and a 24-processor shared-memory high-performance computer, and five labs, including a hypermedia and visualization research laboratory. A full-time systems programmer supports the departmental computing facilities.

Applicants should send a letter of application, vitae without birth date, but with citizenship status, and three letters of reference and transcripts of all graduate work to:

Dr. Yi Pan, Chair

Department of Computer Science

Georgia State University

34 Peachtree Street, Suite 1450

Atlanta, GA 30303

or e-mail to: pan@cs.gsu.edu

Applications will be accepted until position is filled.

Georgia State University is an EEO/AA institution.

Johns Hopkins University Department of Computer Science Faculty Position

The Department of Computer Science at Johns Hopkins University is seeking applications for a tenure-track faculty position. Our primary interest is hiring at the Assistant Professor level, but candidates of all ranks will be considered. All areas will be considered, but candidates with research agendas in applied algorithms and bioinformatics will receive special attention.

All applicants must have a Ph.D. in computer science or a related field and are expected to show evidence of an ability to establish a strong, independent, multidisciplinary, internationally recognized research program. Commitment to quality teaching at the undergraduate and graduate

levels will be required of all candidates considered. The department webpage at <http://www.cs.jhu.edu>, provides information about the department, including links to research laboratories and centers.

Applicants should apply using the online application which can be accessed from:

<http://www.cs.jhu.edu/apply>.

(for full consideration, before January 5 2007). Questions should be directed to fsearch@cs.jhu.edu.

The Department is committed to building a diverse educational environment; women and minorities are strongly encouraged to apply.

The Johns Hopkins University is an EEO/AA employer.

Faculty Search

Department of Computer Science

Room 224 New, Engineering Building

Johns Hopkins University

Baltimore, MD 21218-2694

Fax: 410-516-6134/Phone: 410-516-8775

fsearch@cs.jhu.edu

<http://www.cs.jhu.edu/apply>

Lawrence Berkeley Lab National Energy Research Scientific Computing Center (NERSC) Computing Positions

The following positions are open in the National Energy Research Scientific Computing Center (NERSC), the flagship scientific computing facility for the Office of Science in the U.S. Department of Energy (DOE). NERSC is one of the largest facilities in the world devoted to providing computational resources and expertise for basic scientific research and is a world leader in accelerating scientific discovery through computation. NERSC is part of Berkeley Lab and located in Oakland, CA.

HPC Linux/AIX Computational Systems Analyst, Job# 19454

Key responsibilities include configuring, analyzing, and evaluating hardware and software, as well as overseeing the installation, testing and operation of large scale computational systems including job scheduling, system-wide functionality and tuning in a 24x7 production environment. Work will be performed at the Oakland Scientific Facility (OSF) location in Oakland, California.

Qualifications: Minimum of 4 years of related education and experience with 3+ years' system analyst experience of large-scale UNIX based systems in a high performance computing environment. C and shell programming and software development skills is necessary, in addition to LoadLeveler, PBS, LSF, or NQE experience. More information is available

ROCHESTER INSTITUTE OF TECHNOLOGY

Computer Science Faculty Openings Fall 2007

The Computer Science Department at the Rochester Institute of Technology invites applications for tenure-track positions beginning September 1, 2007. The priority of the Department is to hire in the areas of databases and graphics.

The Department of Computer Science is part of the Golisano College of Computing and Information Sciences. The Department has 30 full-time faculty and enrolls over 850 B.S. and over 200 M.S. students. Faculty in the Department actively participate in the College's unique Ph.D. program in Computing and Information Sciences, as well as the Center for Advancing the Study of Cyberinfrastructure (CASCI). The college also includes the departments of Information Technology; Networking, Security, and Systems Administration; and Software Engineering.

The Department emphasizes a strong commitment to teaching and research. Faculty are expected to develop and teach undergraduate and graduate courses and to participate in a research program. All applicants must hold a Ph.D. in Computer Science by the starting date, be committed to excellence in teaching, have demonstrated potential for excellence in research, and have the ability to contribute in meaningful ways to RIT's commitment to cultural diversity and pluralism.

Applications are currently being accepted and will be accepted until January 15, 2007. Please submit a letter of interest, a current curriculum vitae, a one-page statement of teaching and research experience/interests, a copy of one recent representative research paper, and the names and contact information of at least three references electronically to:

gccisfacultyrecruitment@rit.edu

Materials should be addressed to Dr. Edith Hemaspaandra, Search Committee Chair.

R · I · T

"providing career education over a lifetime"

RIT is an Affirmative Action/Equal Employment Opportunity Employer.

Professional Opportunities

at <http://jobs.lbl.gov/LBNLCareers/details.asp?jid=19454&p=1>.

Network Engineer, Job# 19474

Key responsibilities include designing, building, maintaining, and monitoring the 10 gigabit Ethernet NERSC local area network, the 10 gigabit connection to the Internet, and the NERSC Global Filesystem (NGF) local Fiberchannel network. Work will be performed at the Oakland Scientific Facility (OSF) off-site location in Oakland, California.

Qualifications: Minimum of 8 years of related education and experience, of which at least five or more years is in high performance TCP/IP local area networks and/or high performance computing systems analysis. Experience with routers, switches and firewalls, especially configuration of Juniper and Cisco routers is required. The candidate must also have experience with AIX and/or Linux systems administration and network configuration. <http://jobs.lbl.gov/LBNLCareers/details.asp?jid=19474&p=1>.

HPC Linux/AIX Mass Storage Systems Analyst, job# 20030

Key responsibilities include providing 24x7 production support for highly reliable, high performance, large capacity archival storage systems which are utilized by DOE research scientists world-wide. Work will be performed at the Oakland Scientific Facility (OSF) off-site location in Oakland, California.

Qualifications: Minimum of 4 years of related education and experience with 3+ years' system administration experience of large-scale UNIX based systems in a high performance computing environment. C and shell programming and software development skills are required. Enterprise level tape and disk storage software and hardware, as well as database administration experience is necessary. <http://jobs.lbl.gov/LBNLCareers/details.asp?jid=20030&p=1>.

For consideration, go to: <http://jobs.lbl.gov>.

to apply online, select "Search Jobs", and enter the corresponding job number in the keyword search field. Once you have located the position, click "Apply Now" and follow the online instructions to complete the application process. Be sure to reference World Wide Web/Computing Research News) as your source.

Berkeley Lab is an affirmative action/equal opportunity employer committed to the development of a diverse workforce.

Marshall University

Weisberg Division of Engineering and Computer Science
Assistant/Associate Professor of Computer Science & Information Systems

A Computer Science faculty position is available at the Assistant or Associate Professor level in the College of Information Technology and Engineering (CITE) at Marshall University, Huntington, WV.

See <http://www.marshall.edu/human-resources/jobs> recruiting bulletin 10/20/2006, Search No. 11697 for information regarding the job and the application process.

Interested candidates can also visit <http://www.marshall.edu/cite> for information about the college.

McGill University School of Computer Science Assistant Professor

The School of Computer Science at McGill University wishes to invite applications for a tenure-track position at the assistant professor level, to begin July 1, 2007. Applications for more senior positions are also welcome. We are searching for a computational biologist who is interested in one of the following areas: algorithms in bioinformatics, machine learning/statistical inference in bioinformatics, dynamical models in bioinformatics, and bioinformatics database and system design.

Bioinformatics at McGill University has greatly expanded over the past six years and candidates would benefit from the world class medical school and biomedical research programs. The McGill Center for Bioinformatics is comprised of approximately 16 members who are involved in large scale projects that include (but are not limited to) areas such as genomics, epigenomics, functional genomics, proteomics, structural biology, chemi-informatics, clinical informatics, modelling in physiology, and evolution.

Complete hardcopy or pdf format applications, including a curriculum vitae, a list of publications with copies of one or two sample reprints, a research statement as well as a teaching statement, and the names and e-mail addresses of three references should be sent to:

biosearch@cs.mcgill.ca
or mailed to the address below:
Bioinformatics Search Committee
School of Computer Science
3480 University Street
Montreal, QC H3A 2A7 Canada

The review of applications will begin on January 9, 2007, and applications should be submitted by that date; however, applications will continue to be accepted until March 1, 2007, or until the position is filled.

McGill is the top-rated research university in Canada. It is located in the heart of vibrant, multicultural Montreal. For further information about our department, see: <http://www.cs.mcgill.ca>, and for information on the McGill Center for Bioinformatics, see: <http://www.mcb.mcgill.ca>.

We encourage all qualified candidates to apply; however, Canadians and permanent residents of Canada will be given priority. McGill University is committed to equity in employment.

McGill University School of Computer Science Assistant Professor

The School of Computer Science at McGill University invites applications for one tenure-track position at the assistant professor level, to begin July 1, 2007 in the general area of computer graphics, including human-computer interaction, visualization, and physically based simulation.

Complete hardcopy or pdf format applications, including a curriculum vitae, a list of publications with copies of one or two sample reprints, a research statement as well as a teaching statement, and the names and e-mail addresses of three references should be sent to:

graphics@cs.mcgill.ca
or mailed to the address below:
Graphics Search Committee
School of Computer Science
3480 University Street, Room 318
Montreal, QC H3A 2A7 Canada

The review of applications will begin on January 9, 2007, and applications should be submitted by that date; however, applications will continue to be accepted until March 1, 2007, or until the position is filled.

McGill is the top-rated research university in Canada. It is located in the heart of vibrant, multicultural Montreal. For further information about our department, see: <http://www.cs.mcgill.ca>.

The successful candidate will have the opportunity to interact with McGill's many interdisciplinary centres and programs, including the Centre for Intelligent Machines (CIM), the Brain Imaging Centre (BIC), and also with the dozens of game companies in the Montreal area.

We encourage all qualified candidates to apply; however, Canadians and permanent residents of Canada will be given priority. Truly outstanding applicants in other areas may be considered.

McGill University is committed to equity in employment.

McGill University School of Computer Science Assistant Professor

The School of Computer Science at McGill University invites applications for one tenure-track position at the assistant professor level, to begin July 1, 2007 in the general area of geometric computation.

Complete hardcopy or pdf format applications, including a curriculum vitae, a list of publications with copies of one or two sample reprints, a research statement as well as a teaching statement, and the names and e-mail addresses of three references should be sent to geometry@cs.mcgill.ca,

or mailed to the address below:
Geometry Search Committee
School of Computer Science
McGill University
3480 University Street, Room 318
Montreal, QC H3A 2A7 Canada

The review of applications will begin on January 9, 2007, and applications should be submitted by that date; however, applications will continue to be accepted until March 1, 2007, or until the position is filled.

McGill is the top-rated research university in Canada. It is located in the heart of vibrant, multicultural Montreal. For further information about our department, see: <http://www.cs.mcgill.ca>.

The successful candidate will be expected to be active in both theory and applications, and to interact with one or more groups at McGill with strong interests in geometry.

We encourage all qualified candidates to apply; however, Canadians and permanent residents of Canada will be given priority. Truly outstanding applicants in other areas may be considered.

McGill University is committed to equity in employment.

Mount Holyoke College Computer Science Department Associate / Full Professor, Chair Computer Science

Mount Holyoke College seeks an accomplished teacher/scholar for appointment as associate or full professor and chair of computer science.

Successful candidates will have an active, externally-funded research program; an outstanding record in teaching and curriculum development at the undergraduate level; and sufficient experience to lead the department. Candidates from all areas and sub-disciplines of computer science are invited to apply. Scholars with strong interdisciplinary interests are especially welcome. The new chair will be expected to take the lead in directing the growth and development of the department's personnel, infrastructure and curriculum. The oldest continuing women's liberal arts college in the US, Mount Holyoke is a national leader in training women for careers in the sciences. The College boasts a diverse and active faculty which values interdisciplinary cooperation and collaboration, with a 2 - 2 teaching load, generous sabbatical program, and competitive salary and research start-up packages.

Candidates should submit a CV, research description, teaching and curriculum statement online at:

<http://jobsearch.mtholyoke.edu>.
Arrange to have three letters of recommendation submitted directly to: human-resources@mtholyoke.edu

or:
Mount Holyoke College
50 College Street
1 Skinner Hall
South Hadley, MA 01075

Attention: Computer Science Search
Mount Holyoke is an undergraduate liberal arts college for women with 2,000 students and 200 faculty. Half the faculty are women; a quarter are persons of color. It is located about 80 miles west of Boston in the Connecticut River valley, and is a member of the Five College Consortium consisting of Amherst, Hampshire, Mount Holyoke, and Smith Colleges and the University of Massachusetts.

Mount Holyoke is committed to fostering multicultural diversity and awareness in its faculty, staff, and student body and is an Affirmative Action, Equal Opportunity Employer. Women and persons of color are especially encouraged to apply.

National Science Foundation Division of Undergraduate Education Program Director

NSF's Division of Undergraduate Education (DUE) invites applications for a permanent position as Program Director for computer science education. Program Directors are responsible for program planning and administration and for furthering the goals of NSF and DUE. The person selected for this position will serve as Lead Program Director for the Federal Cyber Service: Scholarship for Service (SFS) program and will coordinate the management of computer science education proposals and awards in other DUE programs. Position requirements and application procedures are detailed in NSF Vacancy Announcement E20070013, which can be found on the Web at:

<http://www.nsf.gov/pubs/2007/e20070013/e20070013.pdf>
or can be obtained by contacting Ms. Von Woodward, telephone 703-292-4386.

Closing Date for applications is Jan. 16, 2007.

NSF is an equal opportunity employer committed to employing a highly qualified staff that reflects the diversity of our nation.

New York University Computer Science Department Faculty Openings

The department expects to have several regular faculty positions beginning in September 2007 and invites candidates at all levels. We will consider outstanding candidates in any area of computer science; high-priority areas are (i) machine learning, (ii) programming languages and formal methods, (iii) theory, and (iv) graphics, human-computer interfaces, visualization and computer vision. We also seek candidates in computational statistics for either a position in the Computer Science Department or a joint position with another NYU department.

Faculty members are expected to be outstanding scholars and to participate in teaching at all levels from undergraduate to doctoral. New appointees will be offered highly competitive salaries, competitive startup packages, and the possibility of affordable housing within a short walking distance of the department. New York University is located in Greenwich Village, one of the most attractive residential areas of Manhattan.

The department has 30 regular faculty members and several clinical, research, adjunct, and visiting faculty members. The department's current research interests include algorithms, computational biology, computer vision, cryptography, distributed and parallel computing, graphics and multimedia, machine learning, natural language processing, networking, operating systems, scientific computing, and verification and programming languages.

Collaborative research with industry is facilitated by geographic proximity to computer science activities at AT&T, Google, IBM, Lucent, Matsushita, NEC, Siemens and Telcordia.

Please apply online at: http://webern.cs.nyu.edu/faculty_applications/.

To guarantee full consideration, applications should be submitted no later than Jan. 2, 2007; however, this is not a hard deadline, as all candidates will be considered to the extent feasible, until all positions are filled. Visiting positions may also be available.

New York University is an equal opportunity/affirmative action employer.

NYU Courant Institute and Columbia APAM Postdoctoral Fellowships

Applications are invited for postdoctoral positions jointly funded by the NSF RTG award Numerical Mathematics for Scientific Software, NYU and Columbia. Further information about the program is available at <http://www.cims.nyu.edu/nmrtg>.

Candidates should have received a doctorate in Mathematics, Computer Science, Physics, Engineering or another related field, and have background both in numerical mathematics and in development of scientific software. Fellowship recipients are required to be US citizens or permanent residents. The initial appointment is for a period of one year, renewable for up to two years.

Applicants are requested to complete the online application at:

<http://www.mathjobs.org/jobs/Courant/683>.
NYU and Columbia are equal opportunity/affirmative action employers.

North Carolina State University Department of Computer Science Faculty Positions

The Department of Computer Science at NC State University (NCSU) seeks to fill multiple tenure track faculty positions starting August 16, 2007.

Candidates in all areas of Computer Science (CS) will be considered, but of particular interest are candidates specializing in Computer Systems, Databases and Data Mining, Security, and Software Engineering. One of the anticipated positions is a joint appointment with the Renaissance Computing Institute (<http://www.renci.org>). Candidates for this position should have interests in Systems and in one or more of Data Mining, Scientific Computing, and Computational Science areas. All candidates should have a strong commitment to academic and research excellence commensurate with the expectations of a major research university, as well as appropriate credentials of the highest quality. These credentials include a doctorate in CS or

Professional Opportunities

a related field. While the department expects to hire faculty predominantly at the Assistant Professor level, candidates with exceptional research records may be considered for senior level positions.

The department has recently moved into a new building on the NC State University Centennial Campus (<http://centennial.ncsu.edu>) locating it at the hub of a dynamic and integrated network of university and industry research organizations, many of which are associated with companies in the nearby Research Triangle. The Department is in a period of growth. Its goal is to be one of the top CS departments in the nation. It currently has over 40 tenured/tenure-track faculty, and over 1000 students - 400 of which are graduate students. Its research is sponsored by a number of agencies and industries, and its research expenditures are growing steadily. We have one of the largest numbers of winners of the prestigious NSF Early Career Award (16 total), several new graduate and undergraduate program concentrations, and we have a top undergraduate program - for example, we are the only U.S. department to win the IEEE Computer Society International Design Competition (in 2005 and 2006). We also are one of the oldest Computer Science degree programs in the United States, and in 2007 we will celebrate our 40th anniversary.

The department is in the NCSU's College of Engineering which has recently received significant increases in private and public funding, faculty positions, and facilities that will also assist the Department in attaining its goal.

NC State University is located in Raleigh, capital of North Carolina, which forms one vertex of the world-famous Research Triangle. The Research Triangle is an innovative environment, a metropolitan area with one of the most diverse industrial bases in the world, that promotes research in technology and science, and currently boasts such major tenants as Cisco Systems, EMC, GlaxoSmithKline, IBM, NetApp, Nortel Networks, SAS Institute, Red Hat (on Centennial Campus), RTI International, and many others, including a number of game development companies, numerous software companies, two renowned medical schools and many large hospitals, pharmaceutical and medical device companies, and so on. The Research Triangle area is routinely recognized in nationwide surveys as one of the best places to live in the U.S. We enjoy excellent health care options, outstanding public schools, affordable housing, and great weather, all in proximity to the mountains and the seashore.

Review of the applications will begin February 1, 2007; however, the position will remain open until a suitable candidate is identified. Applicants should submit the following online at:

<http://jobs.ncsu.edu>

cover letter, curriculum vitae and names and complete contact information including email addresses and phone numbers of four references.

Candidates can obtain further information about the department and its research programs from <http://www.csc.ncsu.edu>. Inquiries may be sent via email to: facultysearch@csc.ncsu.edu.

North Carolina State University is an equal opportunity and affirmative action employer. In addition, NC State University welcomes all persons without regard to sexual orientation. Individuals with disabilities desiring accommodations in the application process should contact the Department of Computer Science at NCSU at 919-515-2858.

Northeastern University College of Computer and Information Science

Faculty Positions

Invites applications for tenure-track faculty positions in computer science and information science, beginning in Fall 2007, at the Assistant Professor level. Exceptional candidates at the senior level (Associate or Full Professor) will also be considered. A PhD in computer science, information science or a related field is required.

Computer Science

Candidates will be considered from all major disciplines of computer science. We particularly welcome candidates with a demonstrated potential to excel in collaborative research spanning multiple research areas. The College has particular strengths in programming languages and software engineering, network security and distributed computing, database

management and information retrieval, artificial intelligence, and human-computer interaction.

Information Science

The Information Science program within the College of Computer and Information Science is concerned with the relationship between information systems and their context of use, with a focus on the design of innovative information models and solutions and the evaluation of their effectiveness and impact. Applications from all areas of information science and information systems are welcome. We particularly welcome candidates with research programs related to medical or health care informatics, information security, and/or information architecture. Areas of faculty research in information science include human-computer interaction, speech and language processing, information retrieval, machine learning, data mining, and ontologies. Current application areas include health care informatics, legal information retrieval, assistive technologies, and mobile and ubiquitous computing.

The College maintains a strong research program with significant funding from the major federal research agencies and private industry. The College has a diverse full-time faculty of 25, with approximately 550 undergraduates, 175 Masters, and 60 Ph.D. students.

Northeastern University is located on the Avenue of the Arts in Boston's historic Back Bay. The College occupies a new state of the art building opposite Boston's Museum of Fine Arts.

Additional information and instructions for submitting application materials may be found at the following web site:

<http://www.ccs.neu.edu/hiring/>.

Screening of applications begins immediately and will continue until the search is completed.

Northeastern University is an Equal Opportunity/Affirmative Action Employer. We strongly encourage applications from women and minorities.

Oakland University Computer Science and Engineering Department Faculty Positions

The Department of Computer Science and Engineering invites applications for two tenure-track positions at the assistant professor level. Applicants must have completed a Ph.D. in Computer Science, Computer Engineering or a closely related field by the appointment date. Candidates must show exceptional promise in both research and teaching. Desired areas of interest include networking, distributed and grid computing, sensor networks, information assurance and security, operating systems and compilers, multimedia and computer gaming, and medical image processing. Strong candidates in other areas will also be considered.

Applications should be submitted by February 1, 2007 but will be accepted until the position is filled. Applicants should send a letter of intent, a statement of research and teaching interests, resume, and the names of three references to:

Search Committee
Department of Computer Science and
Engineering
Oakland University
Rochester, MI 48309-4478
Email: csearch@secs.oakland.edu

Oakland University, a public institute of over 17,000 students, is located in Michigan's Automation Alley. The CSE Department currently has 14 tenure-track faculty and an enrollment of approximately 40 doctoral, 152 graduate and 315 undergraduate students. The undergraduate programs are accredited by ABET and CSAB. For more information on the CSE Department, please visit

www.cse.secs.oakland.edu.

Oakland University is an affirmative action/equal opportunity employer and encourages applications from women and minorities.

Pennsylvania State University Department of Computer Science and Engineering

Faculty Position Vacancies

Applications are invited for several tenure-track faculty positions at all ranks. Outstanding candidates in all areas of computer science and engineering will be considered. Areas of

particular interest are: Data Mining with a background on database technologies; Software Systems with an emphasis on storage systems, virtualization and technologies for productivity enhancement; Compilers and Programming Languages with an emphasis on parallel systems, formal verification and high performance computing; and Scientific Computing with a focus on scalable algorithms and systems for modeling and simulation. Candidates are also sought for interdisciplinary joint positions in the areas of bio-inspired computing and nanotechnologies, computational science and engineering, and bioinformatics.

The Department of Computer Science and Engineering (CSE) has 31 collegial, tenure-track faculty. The undergraduate and Doctoral programs are ranked in the top 20 by the US News and World Report. The university is committed to growing the faculty ranks over the next several years. Eight members of our faculty are recipients of the NSF Career Award. In recent years, our faculty received seven NSF ITR Grants, a \$2.5M Research Infrastructure Grant, five NSF Cyber Trust awards, and several awards from DARPA and ARL. There are state-of-the-art research labs for computer systems, computer vision and robotics, microsystems design and VLSI, networking and security, scientific computing, bioinformatics and virtual environments. The Department offers a graduate program with about 42 Masters students and 142 Ph.D. students, and undergraduate programs with minimum GPA requirements in computer science and computer engineering. In December, 2003, the Department relocated into a new 100,000 square foot building (<http://www.cse.psu.edu/ist.html>).

Penn State is a major research university and is ranked third in the nation in industry-sponsored research among universities. US News and World Report consistently ranks PSU's College of Engineering undergraduate and graduate programs in the top 15 of the nation. The university is located in the beautiful college town of State College in the center of Pennsylvania. State College has 40,000 inhabitants and offers a variety of cultural and outdoor recreational activities nearby. The university offers outstanding events from collegiate sporting events to fine arts productions. Many major population centers on the east coast (New York, Philadelphia, Pittsburgh, Washington D.C., Baltimore) are only a few hours drive away and convenient air services to several major hubs are operated by three major airlines out of State College.

Applicants should hold a Ph.D. in computer science, computer engineering, or a closely related field and should be committed to excellence in both research and teaching. Support will be provided to the successful applicants for establishing their research programs. We encourage dual career couples to apply. Applications should be received by January 31, 2007 to receive full consideration.

To apply by electronic mail, send your resume (including curriculum vitae and the names and addresses of at least three references) as a postscript file or pdf file to:

recruiting@cse.psu.edu.
Applications may also be sent by mail to:
Chair, Faculty Search Committee
The Pennsylvania State University
Department of Computer Science and
Engineering
Search 015-37, Box WEB
University Park, PA 16802-6106 USA

For more information about the Department of CSE at PSU, see <http://www.cse.psu.edu>. Click the Faculty link under Employment to fill out and print an Affirmative Action Applicant Data Card. NOTE: This will require you to have Adobe Acrobat Reader 4.0 or better to download this form and fill it in prior to printing it. This form can then be faxed to Beth Kennedy at (814) 865-3176.

Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce. Women and minorities are encouraged to apply.

Pennsylvania State University College of Information Sciences and Technology Security and Risk Analysis Position

The Penn State College of Information Sciences and Technology (IST) invites applications for a tenure-track position at all ranks in all areas of Security and Risk Analysis (SRA). Highly qualified candidates at assistant

professor rank will be considered for a PNC Career Development Professorship. Candidates who conduct interdisciplinary research with a broad and integrated view of SRA (i.e., information & cyber security, intelligence analysis & modeling, and social issues & risk) are especially welcomed to apply. The recruiting emphases are in the following areas: 1) data mining and social networks, 2) digital forensics, 3) economic crime investigations, 4) security auditing and trustworthy computing, and 5) identity and digital rights management.

A principal requirement is demonstrated excellence in research and potential for excellence in instruction. Successful applicants will be expected to establish a quality research program and teach both graduate and undergraduate courses in SRA and IST.

Penn State is a major research university and is ranked second in the nation in industry-sponsored research among universities. IST is one of the top i-schools in the nation with a strong sponsored research program (our active research grants are now approximately \$8.0 million and growing each year). The new undergraduate major in "Security and Risk Analysis" began in Fall 2006. Coupled with a rapidly expanding, world-class funded security research area and a successful NSA-sponsored Center for Academic Excellence in Information Assurance Education, IST is positioned to be a world leader in Security and Risk Analysis scholarship. Our baccalaureate programs have approximately 800 students and our PhD program has approximately 75 students. To learn more about SRA and IST, please go to www.psu.edu. To learn more about Penn State and State College, PA, please go to www.psu.edu.

Screening of candidates will begin 29 December, 2006 and will continue until the position is filled. Your application should include a cover letter which clearly indicated your area (s) of emphasis (see above), full curriculum vitae, a one page statement of professional interests and teaching ability (including interdisciplinary philosophy), and a separate listing of three references (reference letters will be requested under separate cover) that includes their names, addresses, phone/e-mail addresses.

We strongly encourage you to submit your application on-line through the school's faculty search Web page:

<http://recruit.ist.psu.edu/>.

Alternatively, applications can be submitted through postal mail to:

Chairperson
IST Faculty Search Committee
School of Information Sciences and
Technology
325B IST Building
The Pennsylvania State University
University Park, PA 16802

Inquiries can be sent by e-mail to: recruit@ist.psu.edu.

Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce. Women and members of underrepresented groups are encouraged to apply.

Pomona College Department of Computer Science Assistant Professor

Assistant Professor of Computer Science with specialty in Artificial Intelligence to begin July, 2007. Teaching load equivalent to four courses a year. Pomona College, founding member of the Claremont Colleges, is a highly selective liberal arts college attracting a diverse, national student body.

Send letter of application, detailed cv, graduate transcript, three or more letters of reference (one evaluating teaching), teaching statement, and description of research accomplishments and plans to:

search@cs.pomona.edu

or to:

Search Committee
Department of Computer Science
Pomona College
610 North College Avenue
Claremont, California 91711-6348

Further information: www.cs.pomona.edu/search07.html. Applications received by January 6, 2007, will receive full consideration.

Pomona College is committed to increasing excellence through diversity and welcomes applications from women and members of underrepresented groups.

Professional Opportunities

ROCHESTER INSTITUTE OF TECHNOLOGY

COMPUTER AND INFORMATION SCIENCES PH.D. PROGRAM DIRECTOR AND FACULTY OPENINGS

Rochester Institute of Technology's B. Thomas Golisano College of Computing and Information Sciences invites applications and nominations for the following tenured/tenure-track positions to support its new, innovative, interdisciplinary Ph.D. program in Computing and Information Sciences:

- ✓ Ph.D. Program Director
- ✓ Three (3) Tenure-track Research Faculty

Successful candidates must have a doctorate in a relevant discipline, a strong record of research in the application of computing technology to problems in the sciences, mathematics, engineering, business, or social sciences, and a proven record of research funding. The faculty responsibilities will include teaching and research; tenure and rank are negotiable. Successful candidates for the Program Director position must also have management and leadership experience, a strong commitment to graduate education at the Ph.D. level, and credentials appropriate for appointment as a tenured full professor. All candidates should be able to contribute in meaningful ways to RIT's commitment to cultural diversity and pluralism.

The Golisano College of Computing and Information Sciences is home to the Computer Science, Information Technology, Software Engineering, and Networking, Security, and Systems Administration departments, as well as the Center for Advancing the Study of Cyberinfrastructure (CASCI), the research arm of the college. The College is housed in 165,000 square feet of dedicated space with state-of-the-art facilities, adjacent to our 9,000 sq. ft. research center. The College currently has 91 full-time faculty members, over 2,200 undergraduate students and over 450 Master's level graduate students. The Ph.D. program focuses on the theoretical and practical aspects of Cyberinfrastructure (including but not limited to high performance computing, grid computing, data mining, visualization, human-computer interaction, or modeling and simulation) as applied to specific problems across multiple domains. We are building strengths in: astro-informatics, bioinformatics, computational biology, computational science, environmental informatics, medical informatics, services sciences, and electronic commerce.

Review of applications will begin January 30, 2007 and will continue until all positions are filled. Candidates should visit <http://www.rit.edu/~gccis> "Open Positions in GCCIS" for more information about the positions, the application process, and the college. Questions? Email: gccisfacultyrecruitment@rit.edu



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Employment Opportunity Employer.

Princeton University Computer Science Department Tenure-Track Positions

The Department of Computer Science at Princeton University invites applications for Assistant Professor, tenure-track positions. We are entertaining applications in all areas of Computer Science, with particular emphasis on systems. Candidates for more senior ranks with exceptional records of research will also be considered.

Applicants must demonstrate superior research and scholarship potential as well as teaching ability. A Ph.D. or equivalent in Computer Science or related areas is required. Successful candidates at all ranks are expected to pursue an active research program and to contribute significantly to the teaching programs of the department. Applicants should include a resume and the names of at least three people who can comment on the applicant's professional qualifications.

Applications should be submitted to:
<http://www.cs.princeton.edu/jobs>.

The Committee will begin to consider applications in January 2007.

Princeton University is an Equal Opportunity/Affirmative Action Employer.

Purdue University Department of Computer Science Tenure-Track Positions

The Department of Computer Science at Purdue University invites applications for core and multi-disciplinary tenure-track positions beginning August 2007. Applications from outstanding candidates in all areas of computer science will be considered. While we anticipate hiring at the Assistant Professor level, senior positions, especially in the area of experimental systems, will be considered for highly

qualified applicants. Of particular interest for the multi-disciplinary positions are candidates with a research record in high performance computing, scientific visualization, and bioinformatics. Applicants whose research is of a multi-disciplinary nature will be considered within a College of Science-wide hiring effort. The department also seeks to fill a joint position with the Regenstrief Center for Healthcare Engineering; a successful applicant would have a computer science research record with evidence of contribution to healthcare.

The Department of Computer Science offers a stimulating and nurturing academic environment. Forty-two faculty members direct research programs in analysis of algorithms, bioinformatics, databases, distributed and parallel computing, graphics and visualization, information security, machine learning, networking, programming languages and compilers, scientific computing, and software engineering. The department has implemented a strategic plan for future growth supported by the higher administration and recently moved into a new building. Further information about the department and more detailed descriptions of the open positions are available at <http://www.cs.purdue.edu>. Information about the multi-disciplinary hiring effort can be found at <http://www.science.purdue.edu/COALESCE/>. Information about the Regenstrief Center is available at <http://discoverypark.purdue.edu/wps/portal/rche>.

All applicants should hold a PhD in Computer Science, or a closely related discipline, be committed to excellence in teaching, and have demonstrated potential for excellence in research. Salary and benefits are highly competitive. Applicants are strongly encouraged to apply electronically by sending

their curriculum vitae, research and teaching statements, and names and contact information of at least three references in PDF to:

fac-search@cs.purdue.edu.

Hard copy applications can be sent to:

Faculty Search Chair
Department of Computer Science
305 N. University Street
Purdue University
West Lafayette, IN 47907

Applicants matching one search may be considered in other relevant searches when appropriate. Review of applications will begin on October 1, 2006, and will continue until the positions are filled.

Purdue University is an Equal Opportunity/Equal Access/Affirmative Action employer and is committed to building a diverse faculty.

Rutgers University Department of Computer Science Tenure-Track Position

The Rutgers University Department of Computer Science seeks applicants for a junior, tenure-track faculty position starting September 2007, in all areas of systems, including, but not restricted to, information and system security; networking, distributed systems and dependability; software engineering with emphasis on testing, debugging, and validation; programming languages and their runtime environments; and information management.

Applicants should have earned or anticipate a Ph.D. in Computer Science or a closely related field, should show evidence of exceptional research promise, potential for developing an externally funded research program, and commitment to quality advising and teaching at the graduate and undergraduate levels.

Founded in 1766, Rutgers is the eighth

oldest university in the United States, and is the flagship public research university of New Jersey. The Computer Science Department currently has 39 faculty members, many of whom are affiliated with three CS-related research centers: DIMACS (Discrete Mathematics and Theoretical Computer Science), WINLAB (Wireless Networking and Sensors), and CBIM (Computational Biomedicine, Imaging and Modeling). Geographic proximity facilitates faculty collaborations with industrial research colleagues at the IBM T.J. Watson Research Center, AT&T Research, Google (NYC Lab), NEC, Telcordia, and Siemens Research as well as academic colleagues at Columbia, Princeton, University of Pennsylvania, and NYU.

Rutgers is located in central New Jersey, less than an hour from New York City and a half-hour from Newark International Airport; the New Brunswick train stations sits on the Amtrak Northeast Corridor serving Boston through Washington, D.C. The area has excellent schools, a thriving theater scene, outstanding restaurants, and is in close proximity to a diverse range of outdoor pursuits.

Applicants should send their curriculum vitae, a research statement addressing both past work and future plans, and a teaching statement to:

hiring@cs.rutgers.edu.

If electronic submission is not possible, hard copies of the application materials may be sent to:

Professor Barbara Ryder, Hiring Chair
Computer Science Department
Rutgers University
110 Frelinghuysen Road
Piscataway, NJ 08854

Applications should be received by January 20, 2007, for full consideration.

(continued)

Professional Opportunities

Rutgers subscribes to the value of academic diversity and encourages applications from individuals with varied experiences, perspectives, and backgrounds. Females, minorities, dual career couples, and persons with disabilities are encouraged to apply.

Rutgers is an affirmative action/equal opportunity employer.

Rutgers University Computational Biology or Biomedical Informatics

Tenure-Track Faculty Position

The Department of Computer Science and the BioMaPS Institute for Quantitative Biology at Rutgers University invite applications for a tenure-track faculty position at the junior or senior level in the Department of Computer Science. Candidates should have a strong background and experience in computational biology or biomedical informatics, including but not limited to: structural and functional genomics and proteomics, biological networks, evolutionary and systems biology, computational modeling, large scale systems data analysis, and informatics. They should be prepared to work on interdisciplinary projects making substantive Computer Science contributions.

Applicants should submit a cover letter, curriculum vitae, research summary and statement of future research goals, together with a statement of teaching experience and interests, and arrange for four letters of recommendation to be sent on their behalf. Materials should be sent as PDF files to:

Chair
Hiring Committee DCS-BioMaPS
Rutgers University
Department of Computer Science
Hill Center, Busch Campus
Piscataway, NJ 08855
Email: hiringbio@cs.rutgers.edu

For more information on the Department of Computer Science, see <http://www.cs.rutgers.edu>, and for the BioMaPS Institute, see <http://www.biomaps.rutgers.edu>. To ensure proper consideration, applications should arrive by January 15, 2007.

Rutgers University is an Affirmative Action/Equal Opportunity Employer. Women and minority candidates are especially encouraged to apply.

Saint Louis University Department of Mathematics and Computer Science

Tenure-Track Position

Saint Louis University, a Catholic, Jesuit institution dedicated to student learning, research, health care, and service, seeks applicants for a tenure-track position as Assistant Professor of Computer Science in the Department of Mathematics and Computer Science. The position will begin in August 2007. Applications received by January 31, 2007 are assured full consideration.

Quality is the key criterion; all areas of specialty will be considered. Ph.D. in Computer Science or related field required. A successful applicant must have commitment to excellence in undergraduate education and demonstrated potential for a continuing research program. The Department currently has 30 faculty members and offers both a BA and BS program in Computer Science as well as BA, BS, MA and PhD programs in Mathematics.

Formal applications must be made online at: <http://jobs.slu.edu> (Requisition #20060778).

Additional supporting materials must be submitted at: <http://euler.slu.edu/cssearch> including a CV, statements of research interests and educational philosophy and the names of three or more persons serving as references, including at least one who can address the candidate's teaching ability. Contact cssearch@slu.edu for more information.

Saint Louis University is an Affirmative Action/Equal Opportunity Employer (AA/EOE) and encourages the nominations of and application from women and minorities.

Southern Illinois University, Carbondale Computer Science Department

Faculty Position

Applications are invited for one tenure-track faculty position at the Assistant Professor level. The position will begin on August 16, 2007. Basic requirements include a Ph.D. in computer science or related field by date of hire, evidence of ongoing and future research, and

teaching competency in a reasonable number of computer science subjects at both the undergraduate and graduate levels. Applicants with a research specialty in any area of computer science will be considered. Review of completed applications will begin on February 19, 2007 and continue until the position is filled.

Applicants should send a letter of interest, curriculum vitae, and have at least three of your references send their recommendation letters directly to:

Faculty Search Committee
Department of Computer Science
Faner 2125, Mailcode 4511
Southern Illinois University, Carbondale
1000 Faner Drive
Carbondale IL 62901

For more information about the Department of Computer Science, visit our web site at <http://www.cs.siu.edu>. Questions may be directed to the Faculty Search Committee, via georgia@cs.siu.edu.

SIUC is an affirmative action/equal opportunity employer that strives to enhance its ability to develop a diverse faculty and staff and to increase its potential to serve a diverse student population. All applications are welcome and encouraged and will receive consideration.

Southern Methodist University Department of Computer Science and Engineering

Faculty Position

The Computer Science and Engineering Department at Southern Methodist University invites applications for a tenure-track faculty position beginning Fall 2007. Individuals with experience and research interests in all areas of computer science are encouraged to apply. Candidates at the rank of Assistant Professor or Associate Professor are being sought; however Full Professor rank will be considered if the candidate has a strong record of research and teaching. The successful candidate must have, or expect to have, a Ph.D. in Computer Science, Computer Engineering, or a closely related area by date of hire, and must demonstrate a strong commitment to excellence in research and teaching. The Dallas/Fort Worth area is one of the top three high-tech industrial centers in the country providing abundant opportunities for industrial research cooperation and consulting. Dallas/Fort Worth is a multifaceted business and engineering community, offering exceptional museums, diverse cultural attractions, and a vibrant economy.

The CSE Department resides within the School of Engineering and offers BA, BS, MS, and Ph.D. degrees in Computer Science and in Computer Engineering, as well as the MS in Software Engineering and the MS in Security Engineering. SMU has been designated as a National Center of Academic Excellence in Information Assurance Education by NSA and the Department of Homeland Security. The department currently has 15 faculty members with research concentrations in Software Engineering, Data Mining, Bioinformatics, Electronic Design Automation, Network Security, Mobile Computing, Parallel Processing, Computer Architecture and Arithmetic and related areas. Additional information may be found at: enr.smu.edu/cse or by contacting Jeff Tian, Chair of the Search Committee at csesearch@enr.smu.edu.

Interested individuals should send a complete resume and names of three references, including a one-page statement of research interests and accomplishments to:

Beth Minton, Department Coordinator
Department of Computer Science and Engineering
SMU
P. O. Box 750122
Dallas, TX 75275-0122

To insure full consideration for the position, the application must be postmarked by January 15, 2007. The committee will continue to accept applications until this position is filled.

SMU will not discriminate on the basis of race, color, religion, national origin, sex, age, disability, or veteran status. SMU is committed to nondiscrimination on the basis of sexual orientation.

Stevens Institute of Technology Department of Computer Science

Assistant Professor

The Computer Science Department at Stevens Institute of Technology invites applications for faculty positions in the areas of Secure Systems, Machine Learning and Vision-based Medical Imaging, to complement and reinforce its existing research activity in Cybersecurity and Computer Graphics / Vision / Visualization. Outstanding applicants in other areas may also be considered. Hiring is primarily at the assistant professor level, although outstanding candidates at other levels may be considered. Applicants are expected to have a Ph.D. in Computer Science, or in a closely related field, by August 27, 2007. Further information about the department is available at <http://www.cs.stevens.edu>.

Stevens Institute of Technology is a private university, located in the city of Hoboken, New Jersey. The 55-acre campus is across the Hudson river from midtown Manhattan, and is easily reachable from NYC via public transportation. Hoboken, once the site of filming for *On The Waterfront*, has now become the residence of choice for many professionals working in NYC. Faculty live in Hoboken itself, in NYC, and in bucolic Rockwellesque communities in Northern New Jersey that are on commuter train lines to Hoboken and NYC. Stevens' location offers excellent opportunities for collaborations with other universities and research laboratories in the greater NYC area, as well as easy train connections to Boston, Philadelphia and Washington DC. Over 40% of the tenured and tenure-track faculty of the Computer Science Department are female.

Applications should include a curriculum vitae, teaching and research statements, and contact information for three references. Representative publications should be available on the Web. Applications should be submitted via the web site:

<http://www.cs.stevens.edu/Search/>.

Candidates should ask their references to send letters directly to the search committee. Further information is provided at the web site. Questions about the positions should also be addressed to the web site. Text or PDF are strongly preferred for all application materials and reference letters. Review of applications will begin January 15, 2007 and continue until the positions are filled.

Stevens Institute of Technology is an Affirmative Action/Equal Opportunity employer.

Stony Brook University Department of Computer Science

Faculty Positions

Stony Brook University's Department of Computer Science has tenure-track faculty positions for Fall 2007. Strong candidates in all areas will be considered, but we are particularly interested in receiving applications from highly qualified junior candidates in interdisciplinary areas or whose research bridges traditional academic boundaries, particularly in computational biology, computer games, computer-human interaction, data mining/machine learning, digital media, high-performance computing and architectures, robotics, and information systems (particularly geographical information systems).

The Department currently has 42 faculty members and is expected to recruit additional members in the next few years. There are five main active research areas in the Department: algorithms, computer systems, concurrency/verification, logic programming/database, and visual computing. Detailed information on the research activities of these groups can be found on the Department home page: www.cs.sunysb.edu.

The Department is in a stage of significant expansion, including a new Computer Science building, along with the new New York State Center of Excellence in Wireless and Information Technology (CEWIT). The Department is also associated with the Computational Science Center at the neighboring Brookhaven National Laboratory. The information systems positions may involve teaching at the new and nearby Stony Brook Southampton campus.

Stony Brook enjoys close proximity to both New York City and Long Island's majestic ocean beaches. Its school districts are highly ranked nationally. Opportunities for industrial collaborations abound with many high-profile IT companies close by. Moreover, the Department of Computer Science offers a congenial working environment.

Required: Ph.D. in Computer Science or a related discipline.

Please send a detailed resume, the names of at least three references, and three publications to:

Chair of Faculty Recruiting Committee
Department of Computer Science
Stony Brook University
Stony Brook, NY 11794-4400

and have at least three reference letters sent to the same address.

In addition, please send to the same address a URL pointing to your online resume and publications. For further information or to apply online please visit:

www.stonybrook.edu/cjo

Review of applications will begin soon and will continue until the positions are filled.

Stony Brook is an affirmative action/equal opportunity educator and employer.

SUNY College at Oneonta Mathematics, Computer Science and Statistics Department

Tenure-Track Position

SUNY College at Oneonta seeks applications for a tenure-track position in the Mathematics, Computer Science & Statistics Department at the Assistant Professor rank beginning in the Fall 2007 semester. The initial appointment for this position is two years. The expectations for this position include teaching; research; advisement; and college service. Applicants must have a Ph.D. or A.B.D. in Computer Science at the time of appointment. Strength in theory of computing, human computer interaction, and/or parallel & distributed systems; demonstrated collegiate teaching excellence; and ability to teach diverse courses in an undergraduate Computer Science major program preferred.

Applicants should send a letter of application, curriculum vitae, graduate transcripts, and arrange to have three letters of reference sent to:



Temple University Center for Information Science and Technology & Department of Computer and Information Sciences

ASSISTANT PROFESSOR POSITION

The Center for Information Science and Technology (IST) and the Department of Computer and Information Sciences (CIS) at Temple University are recruiting for a tenure-track position at the Assistant Professor level. The position is contingent upon completion of a Ph.D. in computer science or a related field by August 15, 2007. Applicants are expected to have significant research accomplishments with clear potential for establishing a strong independent, multidisciplinary research program and for mentoring Ph.D., M.S. and B.S. students. Areas of interest include, but are not limited to, biomedical informatics, databases, data mining, information retrieval, and machine learning. Applications from candidates whose research is multidisciplinary in nature are especially encouraged. Commitment to quality teaching at the undergraduate and graduate levels is required of all candidates considered. Salaries for new faculty are highly competitive, and substantial resources have been allocated for startup funding.

Located in Philadelphia, the 5th-largest city in the U.S., Temple University is a comprehensive Carnegie Research I institution that serves more than 34,000 students. IST/CIS faculty are involved in NIH, NSF, DOE, NIST and NIJ-funded research projects with co-investigators from the School of Medicine, the School of Business and Management, and the College of Liberal Arts. There exist many collaboration opportunities within Temple University as well as in the Greater Philadelphia region, which hosts many leading universities and research institutions.

Applications should include a curriculum vitae, a statement of recent achievements and research goals, up to three representative publications, and a statement of teaching philosophy. Applicants should also arrange for three letters of reference to be sent directly to the Faculty Search Committee.

Application materials and reference letters may be submitted via e-mail to: search-cis@ist.temple.edu or sent as hard copy to: Chair, Faculty Search Committee, Department of Computer and Information Sciences, 303 Wachman Hall (038-24), Temple University, 1805 N. Broad Street, Philadelphia, PA 19122-6094

Review of candidates for appointments in the year 2007 will start on February 1, 2007 and will continue until the position is filled. Temple University is an equal opportunity, equal access, affirmative action employer committed to achieving a diverse community. AA, EOE, m/f/d/v.

Professional Opportunities

Dr. Leo J. Alex
Search Committee Chair
Mathematics, Computer Science and
Statistics Department
Box E
SUNY Oneonta
Oneonta, NY 13820

Review of applications will continue until the position is filled.

UNY Oneonta is an EEO/AA/ADA employer. Women, Minorities, and persons with disabilities are encouraged to apply.

SUNY Oswego Computer Science Department Tenure-Track Assistant Professor

The Computer Science Department at SUNY Oswego invites applications for a tenure-track Assistant Professor in Software Engineering, Fall 2007.

A commitment to research and teaching in a diverse academic community and a Ph.D. in Software Engineering or a related field is required. The successful candidate must be able to teach courses in computer science and software engineering at all levels. Special consideration will be given to candidates specializing in systems, enterprise computing, and/or multimedia.

Send a letter, vitae, transcript, and three letters of reference and documentation of teaching effectiveness to:

Software Engineering Search Committee
Computer Science Department
SUNY Oswego
Oswego, NY 13126
Review of applications will begin January 30, 2007.

For a complete description see:
http://www.oswego.edu/administration/human_resources/SoftwareEngineering.html.
An EO Employer.

Tata Research Development & Design Centre (TRDDC) Software R&D Member of Research Staff

Applications are invited for research positions at TRDDC, a research unit of Tata Consultancy Services Ltd. (TCS). Current areas of interest include algorithms, automated software development, data intensive systems, data privacy, decision support systems, formal methods, natural language processing, program analysis, requirements analysis, software architectures and software testing. We are looking for exceptional and highly motivated MS/MTech/PhD candidates with research aptitude who can not only strengthen these areas, but also grow new areas in Computer Science. TRDDC provides an opportunity to pursue a PhD while working.

TRDDC is today one of India's premier R&D centers in software engineering. R & D work at TRDDC leads to the creation of intellectual assets, which take the form of new technologies, models, tools and products that serve the needs of software engineering and TCS clients in a wide range of industry verticals. TRDDC organizes regular workshops, seminars and conferences on advanced areas of R & D maintaining strong links with universities and academic institutions all over the world.

We provide a friendly and informal research environment and actively participate in the activities of the research community worldwide. Our research scientists have the unique opportunity to see their research used in products and services in the industry. If you have a top-flight academic record and a passion for research and development, write to us at:

Opportunities
TRDDC
54 B Hadapsar Industrial Estate
Pune 411 013
INDIA

or email to:
trddc@tcs.com with 'Opportunities' as the subject.

For more details visit us at <http://www.tcs-trddc.com>.

Texas A&M University Department of Computer Science Faculty Positions

Texas A&M University is at the end of a five-year growth campaign to hire 447 faculty members as part of its historic Vision 2020 plan to establish the University as a consensus top-ten public institution. This campaign includes over 100 new positions for the Dwight Look

College of Engineering. As part of the expansion, the Department of Computer Science is recruiting for multiple tenure-track positions at all levels: assistant, associate, and full professor.

Exceptional candidates will be considered in all areas, but special consideration will be given to those in Systems or Systems Software and Information Storage & Retrieval. We are also looking for distinguished candidates in Systems Biology at the level of full professor. Qualified candidates for all positions must have a Ph.D., and will be expected to teach courses, mentor graduate students, and establish a vibrant research program with substantial impact and external funding.

The Department of Computer Science has 40 tenure-track faculty members currently. The faculty holds over 60 important and influential professional positions, including editorships for scientific journals and general chairs of technical conferences. The faculty is also well-recognized for contributions to their fields, with research known throughout the international academic community and global industry alike. The department currently has one National Academy of Engineering member, five IEEE fellows, one ACM Fellow, and eleven PYI/NYI/CARREER awardees. In 2000, four faculty members received the IEEE Third Millennium Medal.

Texas A&M University is centrally located in College Station, Texas, which is roughly equidistant from three of the 10 largest cities in the United States (Houston, Dallas and San Antonio) as well as the State Capital (Austin). Texas A&M ranks in the top-20 U.S. institutions for the enrollment of National Merit Scholars. Enrollment includes approximately 45,000 students, with 8,700 pursuing graduate degrees. Each year, Texas A&M's 2,500 faculty conduct more than \$500 million worth of sponsored research projects.

Additional information about faculty recruiting is available at:
<http://www.cs.tamu.edu/facprospective>.
Prospective candidates should apply online at:

<https://apply2.cs.tamu.edu/gts/applicant/faculty/>.
Review of submitted applications will begin 15 December 2006.

For questions about the positions, please contact: search@cs.tamu.edu.

Texas A&M is an equal opportunity/affirmative action employer and actively seeks candidacy of women and minorities.

Applications are also encouraged from dual-career couples.

Tufts University Computer Science Department Assistant, Associate or Full Professor

The Department of Computer Science at Tufts University invites applications for a faculty appointment at the Assistant, Associate, or Full Professor rank to commence in Summer or Fall 2007. We seek outstanding candidates at all levels in applied areas of computer science. We are particularly interested in applicants who can build interdisciplinary collaborations.

Tufts is among the smallest universities to have been nationally ranked as a "Research Class 1" University. Located in Boston, it has a dynamically growing Computer Science Department, whose faculty have many opportunities for collaboration and participation in the rich intellectual life of the Boston area. For more information about the department, this position, and instructions on how to apply, please visit:

<http://www.cs.tufts.edu/facultysearch07/>.
Screening of applications will begin December 15, 2006 and continue until the position is filled; all applications received by February 1, 2007 are assured of full consideration.

Tufts University is an Affirmative Action/Equal Employment Opportunity employer. We are committed to increasing the diversity of our faculty. Members of underrepresented groups are strongly encouraged to apply.

University of Bridgeport Department of Computer Science and Engineering Tenure-Track Positions

The University of Bridgeport is seeking applications for full-time, tenure-track positions at the Assistant/Associate Professor levels in Computer Science and Engineering. Candidates must have a Ph.D. in CS, CPE or related field.

A strong interest in teaching undergraduate and graduate courses, lab-based courses and an excellent research record are required.

Applicants are sought in the areas of Medical Electronics, Biomedical Engineering, Biometrics, Bio-Informatics, Wireless Design, Distributed Computing, Computer Architecture, Data Base Design, Algorithms, e-commerce, Data Mining and Artificial Intelligence.

Applicants should send a cover letter, resume and address and e-mail address of four references via e-mail to:

School of Engineering Faculty Search
Committee: enfarec@bridgeport.edu.
AA/EOE

University of California, Berkeley Reliable Adaptive Distributed Systems Laboratory Postdoctoral Scholar Employees

The Reliable Adaptive Distributed Systems Laboratory ("RAD Lab") at University of California, Berkeley has an opening for three Postdoctoral Scholar - Employees beginning in May 1, 2007. A doctoral degree in Computer Science or related discipline with emphasis on Computer Systems, Computer Networking, or Machine Learning is required. Salary range is \$38,412 - \$43,632 depending on qualifications. Applicants must have received their Ph.D. within the last three years. The closing date for this position is February 15, 2007.

Postdoctoral Scholar - Employees are appointed for one year, with the possibility of extension to a maximum of three years. The RAD Lab includes experts in Computer Systems (Armando Fox, Anthony Joseph, David Patterson), Computer Networking (Randy Katz, Ion Stoica, Scott Shenker) and Machine Learning (Michael Jordan). We are particularly interested in candidates who want to work at the intersection of systems and machine learning or networking and machine learning. To learn more about the mission of the RAD Lab, see <http://radlab.cs.berkeley.edu>. Financial support for the RAD Lab is primarily from industry, with Google, Microsoft, and Sun Microsystems as our foundation partners.

Please send your CV and updated publications list to "radlab-postdoc@cs.berkeley.edu." Be sure to include at least 3 references.

Minorities and women are encouraged to apply.

The University of California is an EOE/AEE.

University of California, Davis Department of Computer Science Faculty Position

The Department of Computer Science at the University of California at Davis invites applications for a faculty position in Computer Science for an appointment with a begin date in Fall 2007. The appointment will be at the tenure-track Assistant Professor level. The position is one of six new faculty positions at UC Davis associated with the multi-disciplinary Universe@UCDavis initiative (universe.ucdavis.edu). We have particular interest in large-scale scientific data management, distributed computing, machine learning, data mining and analysis, and scientific computing relevant to Cosmology and/or Astronomy. The successful candidate will contribute to the multi-disciplinary Universe@UCDavis project through research and collaboration with faculty in Computer Science, Mathematics, Statistics, and Cosmology on data management and analysis of large-scale cosmological data sets. Depending on the candidate, this position may be split with Physics, Statistics, or Mathematics.

Applicants should have received (or be about to receive) a doctoral degree in Computer Science or a field related to the Universe@UCDavis initiative. Candidates must have demonstrated excellence in research and a commitment to quality teaching. Successful applicants will be expected to establish a top-quality research program and to teach both graduate and undergraduate courses. The department is particularly interested in candidates who have experience working with students from diverse backgrounds and a demonstrated commitment to improving access to higher education for disadvantaged students.

The Department of Computer Science currently has 34 faculty. We are a congenial department with excellence spanning many areas of Computer Science. Davis is a highly-livable town close to both the Bay Area and the Sierra Nevada Mountains.

Interested persons should apply using the instruction given at:

<http://www.cs.ucdavis.edu/department/employ/index.html>.

Applications include a vitae, a personal statement, a select subset of publications, and the names of three references. Review of completed applications will begin January 15, 2007. The position remains open until filled.

UC Davis is responsive to the concerns of dual-career couples and offers a Partner Opportunity Program. UC Davis is an affirmative action/equal employment opportunity employer and is dedicated to recruiting a diverse faculty community. We welcome all qualified applicants to apply, including women, minorities, individuals with disabilities and veterans.

University of California, Los Angeles Department of Computer Science Tenure-Track Positions

The Department of Computer Science in the Henry Samueli School of Engineering and Applied Science at the University of California, Los Angeles, invites applications for tenure-track positions in all areas of Computer Science and Computer Engineering. Applications are also encouraged from distinguished candidates at senior levels.

Quality is our key criterion for applicant selection. Applicants should have a strong commitment to both research and teaching and an outstanding record of research for their level. We seek applicants in any mainstream area of Computer Science and Computer Engineering, but we particularly welcome those with a strength in emerging technologies related to computer science (such as bio-computing, nano architectures, and nanosystems), software systems, and operating systems.

To apply, please visit:
<http://www.cs.ucla.edu/recruit>.

Faculty applications received by January 31 will be given full consideration.

The University of California is an Equal Opportunity/Affirmative Action Employer.

University of California, Merced School of Engineering Senior and Junior Faculty

The School of Engineering at UC Merced invites applicants for senior tenured faculty positions and junior tenure-track positions in Computer Science and Engineering to begin July 1, 2007.

We are seeking exceptionally gifted candidates in the areas of Operating Systems, Distributed Systems, Real Time Systems, Embedded Systems, Networking, Sensor Networks, Programming Languages, Compilers, and Computer Architecture. Other areas in Computer Science or a related field and demonstrated excellence in research are required. Special attention will be paid to applicants who participate in interdisciplinary research.

To apply or for more information:
<http://jobs.ucmerced.edu/n/academic/listings.jsf?seriesId=1>.
AA/EOE.

University of California, Riverside Marlan and Rosemary Bourns College of Engineering Faculty Positions

The University of California, Riverside invites applications for one or more tenure-track and tenured faculty positions in the Department of Computer Science and Engineering for the 2007-2008 academic year. Applicants must have a Ph.D. in Computer Science or in a closely related field. Applications are welcome in all areas of Computer Science and Engineering. Senior candidates must have an exceptional research and teaching record. Junior candidates must show outstanding research and teaching potential. Salary will be commensurate with appointment rank and qualifications.

UC Riverside is among the fastest-growing members of the ten-campus University of California system, widely regarded as the most distinguished system of public higher education in the United States. The CSE Department recently moved to a new state-of-the-art building that also houses the EE Department. The CSE Department offers B.S., M.S., and Ph.D. degrees. More information is available at <http://www.cs.ucr.edu>

(continued)

Professional Opportunities

The search committee will begin reviewing applications on January 1, 2007, and will continue to receive applications until the positions are filled. To apply, please register at: <http://www.engr.ucr.edu/facultysearch/> and submit the requested PDF files.

For inquiries and questions, please contact us at search@cs.ucr.edu.

The University of California, Riverside is an Equal-Opportunity/Affirmative-Action Employer.

University of Central Arkansas Computer Science Department Faculty Position

The Computer Science Department at the University of Central Arkansas (UCA) is continuing its development and growth. After successfully recruiting four tenure-track faculty members in the past four years, we invite applications for another tenure-track faculty position at the assistant/associate professor level to start in Fall 2007. Applicants should have a PhD degree in an area of computer science or computer engineering. A strong commitment to excellence in teaching and to research involving students is expected.

The department offers BS and MS degree programs. It is located in a new building with state-of-the-art equipment and facilities, and it enjoys strong support from local corporations. UCA is committed to excellence in undergraduate and graduate education, and was ranked in the top tier of universities in the south in 2006. UCA is located in Conway, a rapidly growing progressive city 25 miles from Little Rock. Conway has an excellent school system and offers convenient access to numerous recreational sites. For more information about the department and the university, visit www.cs.uca.edu.

Applicants should send a curriculum vitae, statements of teaching and research interests, transcripts, and at least three letters of reference to:

Chair, CS Search Committee
Computer Science Department
University of Central Arkansas
201 Donaghey Avenue
Conway, AR 72035
Electronic submission may be sent to:
CSsearch@list.uca.edu.

Review will begin on January 8, 2007 and continue until the position is filled.

Check www.cs.uca.edu for full details.

UCA is an Equal Opportunity Affirmative Action Employer.

University of Central Florida College of Engineering and Computer Science Associate Scholar/Scientist/Engineer

The College of Engineering and Computer Science (CECS) at the University of Central Florida (UCF) invites applications for the position of Associate Scholar/Scientist/Engineer for a four year time limited position. The individual will coordinate the development of parallel applications in areas such as engineering, biology, chemistry, and physics.

Minimum Qualifications: Doctoral degree from an accredited institution or the highest degree in an appropriate field of specialization with a demonstrated record of academic research achievement, or professional qualifications in the field of specialization above those which would be equivalent to the highest degree. Experience with systems programming and parallel computing are also required qualifications. Must meet the university criteria for appointment which is equivalent to that required of the rank of Associate Professor.

Preferred Preferences: Ph.D. in Mathematics or Computer Science with a strong background in scientific computing. More than five years experience in interdisciplinary research (e.g. biology, chemistry, physics). Prefer individual with a proven record of accomplishments including publications, software development, and experience in writing proposals for competitive funding. Salary range: \$65,000-\$70,000.

Interested candidates should submit a UCF faculty application:

<http://www.ucf.edu/jobs/vacancies/>
letter of interest, current curriculum vitae, and the names and contact information of at least three professional references as a PDF file via email to:

Linda Lockey at: Linda@cs.ucf.edu.

Applications are accepted until the position is filled.

University of Central Florida School of Electrical Engineering & Computer Science Faculty Positions

UCF School of Electrical Engineering and Computer Science is looking for exceptional faculty. We expect to fill several faculty lines in the next few years and invite applications for tenured and tenure-track faculty positions at all levels for appointment in 2007. EECS is specifically interested in candidates with research in the four target areas below, yet applications from outstanding candidates in any area are welcome.

Bioinformatics & Computational Biology: All areas of computational life sciences including genomics, comparative genomics, proteomics, transcriptomics, structural bioinformatics, phylogenetics, system biology, probabilistic and Bayesian models, molecular simulation, medical imaging, data mining/ searching of biological databases.

Energy: Renewable energy research and technology, including photovoltaic applications, distributed electrical power generation, integrated power networks, renewable power system control, computational methods for energy systems, and applications of power electronics in energy conversion systems.

Entertainment Engineering: Computer animation and graphics, experiential systems, mixed and virtual reality, interactive simulation, human-computer interaction, collaborative agents, mobile and pervasive computing, visualization and physical modeling.

Software Engineering: Software processes and workflows, secure and reliable software architectures, software tools and development environments, program comprehension and visualization, software economics and metrics, engineering embedded and real-time software, and mobile, ubiquitous and pervasive computing.

EECS offers a competitive salary and start-up package, and UCF provides generous benefits. New faculty members have graduate student support and significantly reduced teaching loads. Special senior-level positions are available to exceptionally qualified individuals.

Applicants should have a Ph.D. in a related area to EECS disciplines by the start of the appointment and a strong commitment to the academic process, including teaching, scholarly publications and sponsored research. Candidates at the Associate or Full Professor level should have demonstrated leadership in his/her field at the national/international level. Those applying for Assistant Professorships should have a record of high-quality publications and be recognized for their potential.

EECS at UCF is the oldest Ph.D. granting CS program in the state of Florida and has a rapidly growing educational and research program with nearly \$7 million in research contracts and over 500 graduate students and 2,000 undergraduates. UCF is strongly committed to continuing the buildup of strength in EECS, including a move in late 2006 to the new, state-of-the-art Harris Corp. Engineering Center.

Research sponsors include NSF, NASA, DOT, ARO, ONR, PEOSTRI, RDECOM and other agencies of the DOD. Industry sponsors include Adaptec, ATI, Boeing, Canon, Electronic Arts, Harris, Honeywell, IBM, Imagesoft, Intel, Lockheed Martin, Lucent, Oracle and Sun Microsystems as well as local high-tech start-ups.

UCF has over 46,000 students and is among the nation's top-10 largest universities. Located in Orlando, EECS and UCF are at the center of the I-4 High Tech Corridor with a thriving industrial base in telecommunications, computer systems, semiconductors, defense, space, lasers, simulation, software and the world-renowned entertainment/theme park industry. Exceptional weather, easy access to the seashore, one of the largest convention centers in the nation and an international airport that is among the world's best are just a few features that make the UCF/Orlando area ideal.

To submit an application, please go to: http://www.eecs.ucf.edu/facsearch/online_app.html.

UCF is an Equal Opportunity/Affirmative Action employer. Women and minorities are particularly encouraged to apply.

University of Chicago Department of Computer Science Faculty Positions

The Department of Computer Science at the University of Chicago is interested in exceptionally qualified candidates in all areas of Computer Science, at the ranks of Instructor, Assistant Professor, Associate Professor, and Professor.

The University of Chicago has the highest standards for scholarship and faculty quality, and encourages collaboration across disciplines. The Chicago metropolitan area provides a diverse and exciting environment. The local economy is vigorous, with international stature in banking, trade, commerce, manufacturing, and transportation, while the cultural scene includes diverse cultures, vibrant theater, world-renowned symphony, opera, jazz, and blues. The University is located in Hyde Park, a pleasant Chicago neighborhood on the Lake Michigan shore.

Please send nominations or applications to: Professor Stuart A. Kurtz, Chairman
Department of Computer Science
The University of Chicago
1100 E. 58th Street, Ryerson Hall
Chicago, IL 60637-1581
or to: apply-074375@mailman.cs.uchicago.edu (attachments can be in pdf, postscript, or Word).

Complete applications consist of (a) a curriculum vitae, including a list of publications, (b) three letters of reference sent to:

recommend-074375@mailman.cs.uchicago.edu

or to the above postal address, including one which addresses teaching ability, (c) a research and teaching statement which discusses both past research and future plans. Applicants must have completed, or will soon complete, a doctorate degree. Applications must arrive by 01/31/07.

The University of Chicago is an equal opportunity/affirmative action employer.

University of Colorado at Boulder Computer Science Department Tenure-Track Faculty Position

The Department of Computer Science seeks outstanding candidates for a tenure-track faculty position at any level. This position is targeted at candidates whose research focuses on programming languages, software engineering or computer and network systems. Candidates must have a PhD degree in computer science or a related discipline, enthusiasm for working with both undergraduate and graduate students, and the ability to develop an innovative research program. Applications received by January 16, 2007 will be given priority consideration.

The University of Colorado at Boulder is committed to diversity and equality in education and employment. We encourage applications from women and minority candidates.

The application will comprise a cover letter indicating area of specialization, complete curriculum vitae, statements of research and teaching interests, and the names of at least four references.

For instructions on how to submit the application, please visit:

<http://www.cs.colorado.edu/facsearch.html>.

University of Denver Department of Computer Science Tenure-Track Faculty Position

We invite applications for at least one tenure-track faculty position (Assistant or Associate Professor levels) to begin Fall 2007. The minimum requirements are a Ph.D. in CS or a related area by the time the appointment begins and demonstrated ability in research and teaching. The department is particularly interested in a candidate who can teach and direct research in the following areas: software engineering; entertainment computing, interactive simulations and games; trustworthy computing (networks, security, privacy, fault tolerance); and spatial and geometric data management. Outstanding candidates in other areas of Computer Science will be considered as well. The successful candidate is expected to participate fully in the department through an active research program, excellent teaching, and dedicated service.

The Computer Science Department is part of the new School of Engineering and Computer Science (SECS) at the University of

Denver. SECS promotes research and teaching collaborations among different disciplines. Faculty in Computer Science have unique opportunities for cross-disciplinary collaboration. For further information, visit the SECS website at <http://www.du.edu/secs/>.

Our current faculty's research interests include algorithms, computational geometry, computer security, database systems, distributed systems and algorithms, graphics, multimedia systems, performance modeling, software engineering, and symbolic computation and computer algebra. We offer bachelor's, master's and doctoral degrees.

The University of Denver is a medium-size (10,000 students) private university. Class sizes are small, the teaching load is moderate and the salary is competitive. The University is located in an attractive residential area 5 miles from downtown Denver. Denver, with its metro area population of 2.3 million, is consistently ranked as one of the country's top five most pleasant places to live. Many of the country's best ski areas, mountain bike trails, and the 14,000 foot peaks of the Colorado Rockies are only one or two hours away.

The University of Denver is committed to enhancing the diversity of its faculty and staff and encourages applications particularly from women, minorities and the disabled. Application screening will begin immediately and continue until the position is filled.

Applicants should submit a curriculum vitae, a statement of teaching and research interests and have at least 3 reference letters sent to:

Chair, Computer Science Search
Committee
Computer Science Department
School of Engineering and Computer
Science
University of Denver
2360 S. Gaylord Street
Denver, CO 80208-2453
EEO/AA/D/V

University of Florida Department of Computer and Information Science and Engineering Assistant/Associate/Full Professor

The Department of Computer and Information Science and Engineering at the University of Florida invites applications for tenure-track positions at any rank beginning August 2007 or thereafter. Exceptionally strong candidates in any area of computer science or computer engineering are encouraged to apply.

All applicants should hold a PhD in Computer Science, Computer Engineering, or a closely related discipline, and should be committed to excellence in teaching and research. Salary and support are competitive and depend on background and experience.

The CISE Department currently has 35 tenure-track faculty and a student body of 330 graduate and 1151 undergraduate students. The Department encompasses a wide range of research areas including high performance computing, database systems, computer vision, computer graphics, simulation, computer networks and security, and distributed and real-time systems.

Applicants should submit online, a curriculum vitae referencing one of the following position numbers 00008911 or 00009877 and a statement of career objectives to:

<http://www.cise.ufl.edu/employment/faculty/>.

If you are unable to apply using this URL, please use <http://www.cise.ufl.edu/cgi-bin/cgiwrap/gnats/www-send-pr> to report the problem. Applicants are requested to have three letters of recommendation submitted electronically as explained on the aforementioned website. Applications will not be reviewed until all recommendation letters have been received.

The search committee will begin reviewing applications on December 31, 2006 and will continue to accept applications until the positions are filled.

The University of Florida is an equal opportunity institution and women and minorities are encouraged to apply. For more information about the department and positions, please visit <http://www.cise.ufl.edu>.

Professional Opportunities

University of Georgia Faculty of Engineering Computer Systems Engineering three (3) Positions (Assistant or Associate Professor)

As part of a University-wide initiative in Engineering, three faculty positions in computer systems engineering are available beginning July 1, 2007. A detailed position description is available at www.engineering.uga.edu.

Applicants should submit a letter of application, curriculum vitae, statements of research and teaching plans, and at least four letters of reference to:

Dr. Brahm Verma, Chair
CSE Search Committee
Driftmier Engineering Center
The University of Georgia
Athens, GA, 30602-4435

Applications received by January 8, 2007 are assured full consideration.

The University of Georgia is an EO/AA institution.

University of Houston Department of Computer Science Faculty Positions

The Computer Science Department at the University of Houston (www.cs.uh.edu) invites applications for two tenure-track faculty positions starting in August 2007. A wide range of research interests within Computer Science will be considered with an emphasis on software design, software engineering, systems, computational science, human-computer interaction and robotics. Preference will be given to candidates at the Assistant/Associate Professor level but exceptional candidates at all levels will get full consideration. Candidates should hold a Ph.D. in Computer Science, Computer Engineering, or a closely related field.

The Department has strong research programs in Computer Systems (high performance computing, networks, real-time systems, security), Data Analysis (information retrieval, data mining, machine learning) and Computational Life Sciences (biomedical image analysis, computational biomedicine, bioinformatics, biometrics). The Department places strong emphasis on basic and applied research, teaching, and interdisciplinary programs, and maintains close ties with the Texas Medical Center and several local and national industrial partners. At present, the Department has 25 tenure-track faculty members and is expected to add several more positions in the next 4 years. Houston offers an outstanding environment for research and professional opportunities for growth and collaboration. It is host to NASA Johnson Space Center and the largest medical center in the country. Houston is also the epicenter of the world's energy industry.

Applicants should submit their curriculum vitae, a statement of research and teaching goals, and up to two representative publications. Junior candidates should arrange for at least three professional references while senior candidates should provide at least six. All application materials should be submitted on-line at:

<http://www.cs.uh.edu/positions>.

Review of applications will begin immediately and will continue until the positions are filled.

The University of Houston is an equal opportunity/affirmative action employer. Minorities, women, veterans, and persons with disabilities are encouraged to apply.

University of Illinois At Urbana-Champaign Department of Computer Science Tenure-Track/Tenured Positions (Search 10870)

<http://www.cs.uiuc.edu>

The Department of Computer Science, UIUC, invites applications for full-time, tenure-track and tenured professors. Outstanding candidates in all areas of computer science will be considered; special consideration will be given to candidates in HCI, software engineering, bioinformatics, information systems, NLP, machine learning, and computational science. Candidates working in interdisciplinary areas are strongly encouraged to apply.

Tenure-track applicants must have demonstrated excellence in research; tenured applicants must have recognized national and

international stature.

Computer Science at Illinois is internationally recognized for its breadth and depth of research and has strong collaborative relations with many other departments and institutes on campus. It has xx faculty and has recently moved into the newly completed Thomas M. Siebel Center for Computer Science, a large, technologically advanced facility that provides outstanding support to research and education in Computer Science.

Successful candidates must initiate and conduct independent research and perform academic duties associated with our BS, MS, and PhD programs. Qualifications: PhD in Computer Science or a closely related field (or imminent completion of degree), outstanding academic credentials, and the ability to teach effectively at both the graduate and undergraduate levels. Starting date: August 16, 2007. The salary is open, based on qualifications.

To ensure full consideration, applications must be received by January 8, 2007. Early applications are strongly encouraged. Interviews may take place during the application period, but a final decision will not be made until ad closing.

Applicants should submit online an application letter, curriculum vitae, and statement of career objectives to:

www.cs/employment/faculty.html.

If you have questions or are unable to apply using this URL, please send email to:

admin@cs.uiuc.edu for further instructions.

If you do not have Internet access, please call 217-333-6454 to make other arrangements for submitting your application.

The University of Illinois is an Affirmative Action, Equal Opportunity Employer.

University of Kentucky Computer Science Department Assistant Research Professor

The Computer Science Department invites applications for an Assistant Research Professor position. The new faculty member will work with researchers and faculty in the Center for Visualization and Virtual Environments. We are especially interested in candidates with specialization in computer vision, image recognition, and 3-D reconstruction of environments.

The Center for Visualization & Virtual Environments was established in 2003 with initial funding from the Kentucky Office of the New Economy and has grown to include 15 associated faculty, with \$17 million of active grants and contracts to date.

To apply for job # SP514242, a UK Academic Profile must be submitted at: www.uky.edu/ukjobs.

If you have any questions, contact HR/ Employment, phone 859-257-9555 press 2 or email ukjobs@email.uky.edu. Application deadline is October 31, 2006, but may be extended as needed. Upon offer of employment, successful applicants for certain positions must undergo a national background check as required by University of Kentucky Human Resources.

The University of Kentucky is an equal opportunity employer and encourages applications from minorities and women.

University of Maryland College Park Center for Bioinformatics and Computational Biology/UMIACS Department of Computer Science Assistant, Associate, and Full Professor

The University of Maryland invites applications for faculty positions at the assistant, associate, and full professor level in the Center for Bioinformatics and Computational Biology (www.cbcb.umd.edu), to be appointed jointly with the Computer Science Department (www.cs.umd.edu). The University has committed the resources to recruit several new tenured and tenure-track faculty for the Center, directed by Dr. Steven Salzberg, in order to establish a world-class location for research in bioinformatics, computer science, applied mathematics, statistics, molecular biology, genetics, and genomics.

Senior candidates will be expected to lead internationally prominent research programs in computational aspects of genomics and bioinformatics. All applicants are expected to have publications and research experience with strong components of biological science and computing. Experience in interdisciplinary collaboration is an important asset. Exceptional

candidates from areas outside of computer science are also encouraged to apply.

The faculty will be housed in contiguous space dedicated to the Center, and will have access to significant high-end computing infrastructure through the University of Maryland Institute for Advanced Computer Studies. The University of Maryland is located near the nation's capital in Washington, D.C., and offers excellent potential for collaboration with other outstanding bioinformatics and genomics research groups nearby, in organizations such as the NIH, The Institute for Genomic Research, the University of Maryland Biotechnology Institute, and the Smithsonian Institution.

Applicants are asked to apply online at: <https://www.cbcb.umd.edu/hiring/> online/2007.

or by following the link from: <http://www.cbcb.umd.edu/aboutus/jobs.shtml>.

For best consideration applications should be received by January 15, 2007, but applications may be accepted until the position is filled.

The University of Maryland is an affirmative action, equal opportunity employer. Women and minorities are encouraged to apply.

University of Maryland Computer Science Department Jack and Rita G. Minker Professorship

The Computer Science Department in conjunction with the Institute for Advanced Computer Studies is seeking candidates for the newly endowed Jack and Rita G. Minker Professorship in Computer Science. The Professorship will be a tenured, Full Professor position in the Department of Computer Science with a permanent, partial appointment in the Institute for Advanced Computer Studies. While candidates in all areas of computer science will be considered, preference will be given to candidates in Artificial Intelligence. The professorship honors the pioneering contributions of Rita Minker to the early development of computer science, and Jack Minker for his research in AI and his work in support of human rights for scientists.

Applications from women and minority candidates are especially welcome.

Rita G. Minker (April 28, 1927-October 11, 1988), was a mathematician and an early computer programmer who worked on several early digital computers, including the Bell Relay Machine at Bell Laboratories and the RCA BIZMAC computer, where she was RCA's second computer programmer and first woman programmer. She left the computer profession to raise her children and returned to work in 1968 in the newly formed Division of Computer Research and Technology (DCRT) at the National Institutes of Health (NIH). She headed the Training unit in DCRT from 1968-1975, where she taught medical researchers statistical methods and programming. In 1975 she joined the Statistical Software Section, of the DCRT where she was in charge of consulting on and maintaining SPSS, a major statistical package. She died of breast cancer at the age of 61 on October 11, 1988.

Professor Emeritus Jack Minker is a leading authority in artificial intelligence (AI), deductive databases, logic programming and nonmonotonic reasoning. He is also an internationally recognized leader of human rights for scientists. He started his academic career in 1967 at the University of Maryland, Department of Computer Science. He was the department's first Chair (1974-1979). Between 1980-1982, he was Chair, Advisory Committee on Computing to the National Science Foundation. He is considered a founder of deductive databases and the founder of disjunctive databases. He is author of over 150 refereed publications. He was the Founding Editor-in-Chief of the Theory and Practice of Logic Programming, and is now Founding Editor-in-Chief, Emeritus. Among his awards are: Fellow of AAAI, AAAS, ACM and IEEE; the 1985 ACM Outstanding Contribution Award for work on human rights; recipient of the University of Maryland Presidential Medal in 1996; and 2005 recipient of the Allen Newell Award from the ACM/AAAI.

Candidates for the Minker Professorship should submit a vitae and reference list to:

(continued)



**University of
Massachusetts
UMASS Boston.**

Careers with Mass Appeal

**Assistant Professor
Computer Science**

The Computer Science Department at the University of Massachusetts Boston invites applications for Fall 2007 for one faculty position at the Assistant Professor level. We offer a BS, an MS with an emphasis on software engineering, and a Ph.D. in Computer Science. We seek to strengthen our research program significantly. Current faculty interests include biodiversity informatics, computer and human vision, computer science education, data mining, databases, networks, software engineering, system modeling, and theoretical computer science.

Strong candidates will be considered from any area of Computer Science, but preference will be given to a candidate who does research in Networks/Systems. Evidence of significant research potential and a Ph.D. in Computer Science or a related area are required. Send cover letter, curriculum vitae, statements about research and teaching, and the names and email addresses of three references to Search 630d at search@cs.umb.edu.

Our campus overlooks Boston harbor and our faculty and students enjoy professional life in a center of academia and the software industry. For more information, visit us at <http://www.cs.umb.edu>.

Review of applications has begun and will continue until the position is filled. UMass Boston is an affirmative action, equal opportunity Title IX employer.

Professional Opportunities

A Tenure Track Position in Computer Engineering Computer Science and Electrical Engineering Department University of Maryland Baltimore County

UMBC's Computer Science and Electrical Engineering Dept. (<http://www.csee.umbc.edu>) invites applications for a tenure-track Assistant Professor position in Computer Engineering. We prefer applicants with experimental hardware experience, specializing in one or more of the following areas: (1) Digital, SoC, and mixed signal VLSI design and test. (2) Architectures, including DSP integrated circuits and arithmetic algorithms with emphasis on hardware implementations. (3) Embedded systems and sensor networks. However, outstanding candidates in all areas of Computer Engineering will be considered. Applicants must have a Ph.D. in Computer Engineering, Electrical Engineering, Computer Science, or a related discipline. Besides establishing a strong research program in his/her area of interest, the successful candidate is expected to teach both graduate and undergraduate Computer Engineering courses.

The CSEE department is a research oriented combined Computer Science, Computer Engineering, and Electrical Engineering department, with 38 full time faculty and \$4.2M in sponsored research in FY 06. UMBC is strategically located in the Baltimore-Washington corridor, and is close to many important federal agencies.

Applications, comprising a cover letter and a complete CV, are encouraged to be submitted by email to search@csee.umbc.edu, or a paper copy may be mailed to: Computer Engineering Faculty Search Committee, c/o Jane Gethmann, Department of Computer Science and Electrical Engineering, University of Maryland Baltimore County, 1000 Hilltop Circle, Baltimore, MD 21250. Applicants should also arrange for three reference letters to be sent directly. Selection of candidates will start immediately, and will continue until the position is filled.

UMBC is an Affirmative Action/Equal Opportunity employer, and is a recent recipient of a National Science Foundation ADVANCE award to promote hiring and advancement of women in science and engineering. We welcome applications from women, minorities, and individuals with disabilities.

Chair
Minker Professor Search Committee
Computer Science Department
A.V. Williams Bldg.
University of Maryland
College Park, MD 20742
The University of Maryland is an EEO/
Affirmative Action Employer.

University of Miami Department of Computer Science New Faculty Positions

The Department of Computer Science at the University of Miami (<http://www.cs.miami.edu>) invites applications for a tenure-track assistant professor and a visiting (rank open) faculty position starting August 2007.

Outstanding candidates in core areas of Computer Science as well as in emerging frontiers of computational biology, medicine, marine and atmospheric sciences will be considered. Ph.D. is required; post-doctoral experience is desirable.

Applicants should send a letter of application, curriculum vitae, and three letters of reference to:
search@cs.miami.edu

or:
Search Committee
Department of Computer Science
University of Miami
P.O. Box 248154
Coral Gables, FL 33124
University of Miami is an affirmative
action, equal opportunity employer.

University of Michigan, Ann Arbor Department Of Electrical Engineering And Computer Science Computer Science and Engineering Division Faculty Positions

Applications and nominations are solicited for faculty positions in the Computer Science and Engineering (CSE) Division. Qualifications include an outstanding academic record, a doctorate or equivalent in computer engineering or computer science, and a strong commitment to teaching and research. Candidates from all areas of computer science and engineering are encouraged to apply, including architecture and hardware systems,

security, databases and programming languages. Applications must be received by January 16, 2007.

To apply please complete the form at:
<http://www.eecs.umich.edu/eecs/jobs/csejobs.html>
Electronic applications are strongly preferred, but you may alternatively send resume, teaching statement, research statement and names of three references to:

Professor Kareem Sakallah, Chair
CSE Faculty Search
Department of Electrical Engineering and
Computer Science
University of Michigan
2260 Hayward Street
Ann Arbor, MI 48109-2121

The University of Michigan is a Non-Discriminatory/Affirmative Action Employer with an Active Dual-Career Assistance Program.

University of Nebraska-Lincoln Computer Science and Engineering Assistant Professor

We invite applications for a tenure-track faculty position at the rank of Assistant Professor. We are looking for a faculty member who can establish a strong research and teaching program, and can add to our existing strengths in the target area of computer systems. Sub-areas of interest include, but are not limited to: computer architecture, storage and I/O systems, VLSI and embedded systems, networking, and distributed systems. Candidates will hold a PhD in Computer Science, Computer Engineering or closely related discipline.

Applicants will find many opportunities for research collaborations both within and outside the Computer Science and Engineering department. To apply, go to:

<http://employment.unl.edu>
complete the Faculty/Administrative application 060793 and attach required documents. The cover letter should include names of at least three references and statements of teaching and research. Review of applications will begin December 1, 2006, and will continue until the position has been filled. The official advertisement can be viewed at <http://cse.unl.edu/search>.

The University of Nebraska is committed to a pluralistic campus community through affirmative action and equal opportunity and is responsive to the needs of dual-career couples. We assure reasonable accommodation under the Americans with Disabilities Act; contact Professor Sharad Seth at 402-472-5003 for assistance.

University of New Hampshire Computer Science Faculty Position

The Computer Science Department invites applications for a tenure-track position at the Assistant Professor level beginning in Fall 2007. Exceptional candidates at the Associate Professor level will also be considered. The department is particularly interested in candidates with teaching and research interests in artificial intelligence or computer graphics and visualization but also encourages candidates in other areas, especially those that enhance our current research efforts. We require a Ph.D. in Computer Science or closely related field. We seek candidates with a commitment to both quality research and quality teaching. To help achieve this goal, new junior faculty members teach just one course per semester for at least three years.

We offer B.S., M.S., and Ph.D. degrees and currently have approximately 120 undergraduate majors and sixty graduate students. The University of New Hampshire is a medium sized institution of (13,500 students) located in the seacoast region of New Hampshire sixty miles north of Boston and sixty miles south of the White Mountains. The University actively promotes a dynamic learning environment in which qualified individuals of differing perspectives, life experiences, and cultural backgrounds pursue academic goals with mutual respect and shared inquiry.

Applicants should submit a curriculum vitae, a statement of research interests, a statement of teaching interests, a list of references, and up to three sample publications preferably in pdf or Word format by e-mail to:
search@cs.unh.edu.

See also <http://www.cs.unh.edu/search>.
Review of applications will begin on February 15 and will continue until the position is filled.

The University seeks excellence through diversity among its administrators, faculty, staff, and students. The university prohibits discrimination on the basis of race, color, religion, sex, age, national origin, sexual orientation, gender identity or expression, disability, veteran status, or marital status. Application by members of all underrepresented groups is encouraged.

University of North Carolina at Charlotte Department of Software and Information Systems Tenure-Track Faculty Position

Two tenure-track faculty positions available at the associate/assistant professor level. The Department is dedicated to research and education in Computing with emphasis in Information Security & Assurance and Information Integration & Environments. The Department offers degrees at the Bachelor, Master, and Ph.D. levels. Faculty candidates with strong research expertise in Software Engineering, Trusted Software Development, Trusted Information Infrastructures, and Information Security and Privacy are encouraged to apply. Highly qualified candidates in other areas will also be considered. Salary will be highly competitive.

Applicants must have a Ph.D. in Computer Science, Information Technology, Software Engineering, or a related field, as well as a strong commitment to research and education. For further details please visit <http://www.sis.uncc.edu>. Application review will start in January 2007.

Please send a detailed CV together with four references, copies of scholarly publications, and other supporting documents to:
search-sis@uncc.edu.

All materials need to be electronically submitted as separate PDF file attachments. References must be sent directly.

Women, minorities and individuals with disabilities are encouraged to apply.

UNC Charlotte is an Equal Opportunity/Affirmative Action employer.

University of Oregon Computer and Information Science Department Post Doctoral Research Associate

The Computer and Information Science Department at the University of Oregon invites applications for potential postdoctoral positions. All candidates must have a PhD degree in Computer Science or related field. Positions are available on an ongoing basis to conduct research within different research groups. Please see <http://www.cs.uoregon.edu> for information on current research within the department.

We invite applications from candidates who share our commitment to diversity. Applications will be accepted on a continuous basis and the pool will remain active until positions are filled.

Please send a cover letter stating your interest along with a current CV and email addresses of 2 references to:

Jan Saunders, Office Manager
Computer and Information Science
Department
University of Oregon
Eugene, OR 97403-1202

or by email to: jan@cs.uoregon.edu.

AA/EO/ADA institution committed to cultural diversity.

University of Rochester Department of Computer Science Tenure-Track Positions

The Computer Science Department at the University of Rochester invites applications for a tenure-track position in Intelligent Systems, with preference for the areas of machine vision, machine learning, human computer interaction, and computer graphics. We are primarily interested in candidates at the Assistant professor level, but will consider exceptional candidates at the Associate professor level. Applicants at the Assistant Professor level must have received, or be about to receive, a doctorate in Computer Science or a related discipline, and must demonstrate exceptional potential for both research and teaching. Applicants at the Associate Professor level must possess a proven record of outstanding scholarly achievement.

The department has a strong record of publication and external funding. It offers an outstanding research environment, with excellent students and shared facilities, and an unusually close-knit and collegial atmosphere. Current areas of expertise include Artificial Intelligence (assistive technology; computational neuroscience; computational vision; knowledge representation; machine translation; natural language understanding; planning; robotics; virtual reality), Systems (compilers; computer architecture; operating systems and runtime environments; parallel, distributed, and mobile computing), and Theory (algorithms; computational complexity; data mining; molecular computation). The department faculty also participate in externally funded projects with colleagues in more than a dozen other units of the University, with a long history of collaborations with researchers in the Department of Brain and Cognitive Sciences. Total enrollment in the Ph.D. program is approximately 45 students. Further information can be found at <http://www.cs.rochester.edu>.

Applicants should send a curriculum vitae, copies of relevant papers, and the names and addresses of at least three references to:

Faculty Recruiting Committee
Department of Computer Science
University of Rochester
Rochester, NY 14627-0226
Inquiries can be emailed to:
urcs-search@cs.rochester.edu

Although the recruiting committee will attempt to keep reviewing new applications, the interested applicants are strongly encouraged to send in their application by January 31, 2007.

The University of Rochester is an Equal Opportunity employer; women and members of minority groups are strongly encouraged to apply.

University of Saskatchewan Department of Computer Science Tenure-Track Position

Applications are invited for a tenure-track position at the Assistant Professor level. Applicants should have a Ph.D. in Computer Science or equivalent. The appointment will commence July 1, 2007.

Professional Opportunities

We are seeking an outstanding entry-level faculty candidate in the area of computer and software engineering, including human computer interaction, media and database systems, who, can contribute to our multi-disciplinary initiatives in health, synchrotron science, high performance computing, and digital media.

The friendly, supportive and collegial environment, combined with our excellent research reputation, makes the Department an ideal place to launch and develop a successful academic career. Our Department offers graduate programs at the M.Sc. and Ph.D. levels and has a vibrant undergraduate program.

For further information about the Department, see <http://www.cs.usask.ca/>.

Applications will be accepted until January 31, 2007.

University of South Florida Computer Science and Engineering Department Assistant/Associate/Full Professor Position

Applications are invited for a tenured or tenure-track faculty position in the Department of Computer Science and Engineering. We are particularly interested in senior-level candidates (at the associate or full professor level) with expertise in systems including databases, distributed systems, and secure systems. Exceptional junior-level candidates will be considered. Senior-level candidates are expected to have a track-record of building funded research programs. Rank and salary will be commensurate with qualifications and experience. Screening will continue until the position is filled. Candidates must have completed, or be near completion, of a Ph.D. degree in computer science, computer engineering, or a related area.

The Department of Computer Science and Engineering (<http://www.cse.usf.edu>) has 26 faculty members and offers B.S., M.S., and Ph.D. degrees. The graduate program serves approximately 125 students. The research program is well supported (over \$3 million in 2005) by federal and state agencies including DoD, DoE, DoT, NIH, NSF, as well as industry. A strong partnership for inter-disciplinary research exists with the other research centers within the college and university.

The application package should include a cover letter, curriculum vitae, brief statement outlining research and teaching goals, and the names and contact information of at least three references. These application materials are to be submitted online at:

<http://www.cse.usf.edu/faculty-search/>.

For questions please send email to: faculty-search@cse.usf.edu.

The University of South Florida with about 43,000 students is among the 20 largest schools in the nation. The Carnegie Foundation ranks USF for its research in the top national classification. It is one of the nation's fastest growing research universities in terms of federal research and development expenditures, according to the National Science Foundation's 2003 annual Survey of Research and Development Expenditures at Universities and Colleges. It is located in the Tampa Bay metropolitan area with a population of about 2.5 million. USF is among the top 35 universities in the country for educating Hispanics, according to the 2002 Hispanic Outlook for Higher Education. According to Florida law, applications and meetings regarding them are open to the public.

The University of South Florida is an Equal Opportunity/Equal Access/Affirmative Action Institution. Women and minorities are strongly encouraged to apply. Dual career couples with questions about opportunities are encouraged to contact the department chair.

University of Southern California Department of Computer Science Chair

The Viterbi School of Engineering (VSoE) (<http://viterbi.usc.edu>) of the University of Southern California invites nominations and applications for Chair of the Department of Computer Science (<http://cs.usc.edu>).

The Computer Science department has 27 tenured/tenure track faculty, 4 lecturers, and 38 research faculty, and is the second largest in the Viterbi School. The faculty includes a Turing Award co-winner, two members of the National Academy of Engineering, and numerous IEEE and AAAI fellows. The department offers two undergraduate degrees, a B.S. in Computer

Science and a B.S. in Computer Engineering/Computer Science. Both degrees are ABET accredited. There is also a new B.S. degree in Computer Science with an emphasis on games. The department offers strong graduate programs at the M.S. and Ph.D. levels. The Ph.D. program has 240 students, all of whom are fully supported.

The Computer Science department has a close working relationship with several major USC computer science research centers. The Viterbi School's Information Sciences Institute (ISI) (<http://isi.usc.edu>) is a renowned computer science and engineering research institute with over 300 faculty, researchers, students and staff. ISI has combined world-class research with the development of deployable prototype systems to solve problems of national importance for over thirty years. Other major institutes include the Institute for Creative Technologies (ICT) (<http://ict.usc.edu>), and the Integrated Media Systems Center (IMSC) (<http://imsc.usc.edu>), a National Science Foundation (NSF) Engineering Research Center (ERC) now in its 11th consecutive year.

The graduate program of the USC Viterbi School of Engineering has been consistently ranked in the top 10 in US News and World Report for the past several years. The School's 170 tenured and tenure track faculty include 26 members of the National Academy of Engineering, seven winners of Presidential Early Career Awards, 45 Early Career Awards, four winners of the Shannon Award, and a co-winner of the Turing Award. USC faculty conduct research in leading-edge technologies with about \$160 million in research expenditures annually. In addition to the research centers listed above, the Viterbi School is also home to another active NSF ERC (the Biomimetic MicroElectronic Systems Center (<http://bmes.erc.usc.edu/>)), the USC Stevens Institute for Technology Commercialization (<http://stevens.usc.edu/>), and the Department of Homeland Security's first center of excellence (CREATE (<http://www.usc.edu/dept/create/>)).

We seek an individual who can provide strong, dynamic and innovative leadership to advance excellence in research, teaching, and service to the professional community. In addition to a proven record of scholarly achievement, the candidate must also possess technical leadership, commitment to computer science education, management and interpersonal skills. The candidate should have an earned doctorate in computer science or in a closely allied field and be eligible for a tenured full professor appointment.

The position is available starting July 1, 2007. Interested candidates should send a cover letter describing their qualifications and future vision, a curriculum vitae, and contact information to the address below. All application material will be held in the strictest confidence.

Chair Recruitment Committee
Department of Computer Science
Salvatori Computer Science Center,
Room 300

University of Southern California
Los Angeles, CA 90089-0781 USA

USC is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and members of underrepresented groups.

University of Southern California Viterbi School of Engineering Professor and Director

The USC Viterbi School of Engineering seeks a nationally prominent scholar to become a tenured Professor and Director of its Center for Systems and Software Engineering. Applications must include a letter indicating the home Department of interest and the area of specialization, a curriculum vitae, a one-page statement on current and future research, and names of at least four professional references.

The primary qualifications for the Director of CSSE position are research leadership and extensive industry experience in systems engineering and software engineering, entrepreneurial skills, and research group management skills. Either Computer Sciences (CS) or Industrial and Systems Engineering (ISE) could be the home Department for the selectee, and it is intended to carry a joint appointment with the other Department.

With over \$160 million in research expenditures annually, the USC Viterbi School of Engineering ranks first nationally in research

funding per faculty member, and US News and World Report consistently ranks the School's graduate program in the nation's top ten. The Center for Systems and Software Engineering is a recent extension of the USC Center for Software Engineering, established in 1993. It is an interdisciplinary Organized Research Unit with Principals from the CS and ISE Departments, several other Viterbi School Departments, and the Marshall School of Business. Its Principals include eight members of the National Academy of Engineering, ten IEEE Fellows, and the largest number (five) of INCOSE Fellows. Their research is sponsored by numerous organizations, including the National Science Foundation, the Department of Defense, the National Aeronautics and Space Administration, the Federal Aviation Administration, the Department of Homeland Security, the National Institutes of Health, and CSSE's world-leading 33 industry, government, and nonprofit Affiliates.

Mail applications to:

Prof. Barry Boehm, Director, USC-CSSE
University of Southern California
941 West 37th Place, SAL 328
Los Angeles, CA 90089-0781

Candidates may contact the current Director for further information at 213-740-8163, boehm@usc.edu (Please do not provide letters of reference or copies of publications until requested). The review process will begin immediately and continue until the position is filled.

The University of Southern California is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and members of underrepresented groups.

University of Southern California Viterbi School of Engineering Computer Science Department Tenured/Tenure-Track Faculty Positions

The Computer Science Department of the USC Viterbi School of Engineering seeks outstanding faculty candidates at all levels, with priority in the areas of:

- Networks and Network Security
- Artificial Intelligence/Robotics/Machine Learning

We will also consider candidates in other areas of CS, with a particular emphasis on:

- Interactive Game Technologies
- Algorithms/Theory

Applications must include a letter indicating the area of specialization, a detailed curriculum vitae, a one-page statement on current and future research directions, and names of at least three professional references.

We expect candidates to have a strong commitment both to research and to teaching. All applicants must have earned a doctorate in computer science or a closely related field by the date of appointment. The department is primarily seeking individuals at the Assistant Professor rank. These applicants should submit their applications online at:

<http://www.cs.usc.edu/FacultyOnline/>.

However, we are also interested in exceptional senior candidates. These should contact Nancy Levien, Executive Assistant to the Chair, at:

<levien@usc.edu>.

Evaluation of all dossiers will start in November 2006 but later applications will also be considered.

USC's Computer Science Department is one of the leading departments in the country, with innovative curricula, outstanding student quality, high research productivity, and worldwide recognition. USC's Viterbi School of Engineering consistently ranks in the top 10 in the US News & World Report. The School is home to the Information Sciences Institute (ISI), the Integrated Media Systems Center, and the Institute for Creative Technologies (ICT). The Computer Science Department has strong ties to these centers.

USC is an Affirmative Action/Equal Opportunity Employer and encourages applications from women and members of underrepresented groups.

University of Texas at Austin Department of Computer Sciences Tenure-Track Faculty

The Department of Computer Sciences of the University of Texas at Austin invites applications for tenure-track positions at all levels. Excellent candidates in all areas will be seriously considered.

All tenured and tenure-track positions require a Ph.D. or equivalent degree in computer science or a related area at the time of employment. Successful candidates are expected to pursue an active research program, to teach both graduate and undergraduate courses, and to supervise graduate students.

The department is ranked among the top ten computer science departments in the country. It has 45 tenured and tenure-track faculty members across all areas of computer science. The department participates in the University's Computational and Applied Mathematics interdisciplinary program. Austin, the capital of Texas, is located on the Colorado River, at the edge of the Texas Hill Country, and is famous for its live music and outdoor recreation. Austin is also a center for high-technology industry, including companies such as IBM, Dell, Freescale Semiconductor, Advanced Micro Devices, National Instruments, AT&T, CSC, Intel, Samsung. For more information please see the department web page: <http://www.cs.utexas.edu/>.

The department prefers to receive applications online, beginning November 1, 2006. To submit yours, please visit:

<http://recruiting.cs.utexas.edu/faculty/>.

If you cannot apply online, please send a curriculum vitae, home page URL, description of research interests, and selected publications, and ask three referees to send letters of reference directly to:

Faculty Search Committee
Department of Computer Sciences
University of Texas at Austin
1 University Station C0500
Austin, Texas 78712-0233

Inquiries about your application may be directed to faculty-search@cs.utexas.edu.

For full consideration, please apply by January 15, 2007. Women and minority candidates are especially encouraged to apply.

The University of Texas is an Equal Opportunity Employer.

University of Texas - Pan American Department of Computer Science Two Assistant Professor Positions

The University of Texas-Pan American (UTPA), Department of Computer Science, invites applications for two tenure-track positions. The Assistant Professor (F06/07-79) position in Computer Science requires a Ph.D. in computer science or a closely related field and outstanding potential/proven record in teaching and active research. All areas of specialization will be considered. Desired areas are algorithms and theoretical computer science.

The Assistant Professor position in Computer Engineering (F06/07-80) requires a Ph.D. in computer engineering or a closely related field and outstanding potential/proven record in teaching and active research. This position supports the newly approved BS in Computer Engineering, administered jointly by Computer Science and Electrical Engineering. Candidates are welcome in any area of computer engineering; however, we are particularly interested in candidates with a broad background in core areas such as, software engineering, computer architecture, computer networks, secure computing, and parallel and distributed systems.

UTPA is a comprehensive university of 17,500 students with 375 undergraduate and 60 graduate computer science majors, located in subtropical, south Texas. The department is part of the School of Engineering and Computer Science and has 13 full time faculty members. The department offers BSCS (ABET/CAC Accredited) and BS undergraduate degrees, MS in Computer Science and a Master's of Science in Information Technology. Department computing facilities include workstations and PC's in faculty offices, student Linux and PC laboratories, faculty research laboratories, and parallel processing facilities. Salaries are competitive. The region has a very affordable cost-of-living. The position starts Fall 2007. Applications must include:

- (1) a cover letter specifically stating an interest in one of the following: Assistant Professor in Computer Science or in Computer Engineering, (2) vitae; (3) statements of teaching and research interests; and (4) names and contact information for at least three references.

(continued)

Professional Opportunities

Review of applications will begin January 1, 2007 and continue until position is filled.

Please send material to:
University of Texas-Pan American
Department of Computer Science
ENGR 3.295
Chair, Search Committee
1201 W. University Drive
Edinburg, Texas 78541-2999
Email: search@cs.panam.edu
<http://www.cs.panam.edu>

The University of Texas-Pan American is an Equal Opportunity/Affirmative Action employer and welcomes applications from candidates from diverse backgrounds. Women and minorities are encouraged to apply.

Note: This position is security-sensitive and subject to Texas Education Code 51.215(c) and Texas Government Code 411.094(a) (2), which authorizes the employer to obtain a criminal history record. Texas law requires faculty members whose primary language is not English to demonstrate proficiency in English.

University of the District of Columbia Department of Computer Science and Information Technology Tenure-Track Assistant or Associate Professor

A tenure-track assistant (or associate) professor position is available starting 2007. An earned Ph.D. in Computer Science or Information Technology from an accredited institution, evidence of ability to pursue a program of research, and a strong commitment to graduate and undergraduate teaching are required.

Applicants from all mainstream areas of computer science are encouraged to apply. We are primarily interested in candidates in the database, data mining, scientific visualization and bioinformatics areas. The successful candidate will be expected to teach graduate and undergraduate courses, solicit support for the CS and IT programs from industry and government, engage in grant/proposal writing, and participate in ABET accreditation activities. Review of applications will begin immediately and will continue until the search is complete.

Applicants should send a CV, statement of teaching and research interests, and contact information for three professional references in electronic format (Word or PDF files) to:

Dr. S. Zeadally, Chair
Search Committee
CSIT Department
University of the District of Columbia
4200 Connecticut Ave., NW
Bldg 42, Suite 113
Washington, DC 20008
Email: szeadally@udc.edu

The University is an equal opportunity employer. Minority and female candidates are especially encouraged to apply.

University of Toronto Department of Computer Science Assistant Professor

The Department of Computer Science invites applications for a contractually limited-term appointment at the rank of Assistant Professor to begin April 15, 2007, for a term of three years.

We are looking for candidates in the area of software engineering, with special interest in applicants with demonstrated ability to supervise team-oriented undergraduate research projects in software development, and incorporate industrial practice into the academic curriculum and student research activities. Candidates should have a Ph.D. in computer science or a related field, and must have strong demonstrated teaching and research abilities and a strong commitment to undergraduate and graduate teaching and research supervision. Salary will be determined according to the successful applicant's experience and qualifications.

Applications must be received by January 10, 2007. To apply for this position, please visit <http://recruit.cs.toronto.edu/> and follow the instructions.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to the further diversification of ideas.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

University of Toronto Department of Computer Science Assistant Professor

The Department of Computer Science, University of Toronto, invites applications for one position at the rank of Assistant Professor, to begin July 1, 2007.

We are especially interested in candidates with research expertise in database systems but we may also consider applications from candidates in other areas in computer systems. Appointments at more senior ranks may be considered in exceptional cases. The University of Toronto is an international leader in computer science research and education, and the department enjoys strong interdisciplinary ties to other units within the University.

Candidates should have (or be about to receive) a Ph.D. in computer science or a related field, and must demonstrate an ability to pursue innovative research at the highest level, and a strong commitment to graduate and undergraduate teaching.

Salaries are competitive with our North American peers and will be determined according to the successful applicant's experience and qualifications. Toronto is a vibrant and cosmopolitan city, one of the most desirable in the world in which to work and live. It is also a major centre for advanced computer technologies; the department has strong interaction with the computer industry.

To apply for this position, please visit: <http://recruit.cs.toronto.edu/> and follow the instructions.

The review of applications will commence on December 15, 2006 and will continue until the position is filled. To ensure full consideration applications should be received by February 15, 2007.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to the further diversification of ideas.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

University of Toronto Department of Computer Science Assistant Professor

The Department of Computer Science, University of Toronto, invites applications for one position at the rank of Assistant Professor, to begin July 1, 2007.

We are especially interested in candidates with research expertise in theoretical computer science, computer graphics, and human-computer interaction but we may also consider exceptional applications from candidates in other areas of computer science. Appointments at more senior ranks may be considered in exceptional cases. The University of Toronto is an international leader in computer science research and education, and the department enjoys strong interdisciplinary ties to other units within the University.

Candidates should have (or be about to receive) a Ph.D. in computer science or a related field, and must demonstrate an ability to pursue innovative research at the highest level, and a strong commitment to graduate and undergraduate teaching.

Salaries are competitive with our North American peers and will be determined according to the successful applicant's experience and qualifications. Toronto is a vibrant and cosmopolitan city, one of the most desirable in the world in which to work and live. It is also a major centre for advanced computer technologies; the department has strong interaction with the computer industry.

To apply for this position, please visit: <http://recruit.cs.toronto.edu/> and follow the instructions.

The review of applications will commence on December 15, 2006 and will continue until the position is filled. To ensure full consideration applications should be received by February 15, 2007.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women,

Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to the further diversification of ideas.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

University of Toronto Department of Computer Science Assistant Professor or Associate Professor

The Department of Computer and Mathematical Sciences, University of Toronto at Scarborough, invites applications for one position at the rank of Assistant Professor or Associate Professor (tenured), to begin July 1, 2007.

We are interested in candidates with research expertise in computer systems, including operating systems, networks, distributed systems, database systems, programming languages, software engineering and computer architecture. The University of Toronto is an international leader in computer science research and education, and the department enjoys strong interdisciplinary ties to other units within the University.

Candidates should have (or be about to receive) a Ph.D. in computer science or a related field, and must demonstrate an ability to pursue innovative research at the highest level, and a strong commitment to graduate and undergraduate teaching.

Salaries are competitive with our North American peers and will be determined according to the successful applicant's experience and qualifications. Toronto is a vibrant and cosmopolitan city, one of the most desirable in the world in which to work and live. It is also a major centre for advanced computer technologies; the department has strong interaction with the computer industry.

To apply for this position, please visit: <http://recruit.cs.toronto.edu/> and follow the instructions.

The review of applications will commence on December 15, 2006 and will continue until the position is filled. To ensure full consideration applications should be received by February 15, 2007.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to the further diversification of ideas.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.

University of Washington Computer Science & Engineering Tenure-Track, Research, and Teaching Faculty

The University of Washington's Department of Computer Science & Engineering has one or more open positions in a wide variety of technical areas in both Computer Science and Computer Engineering, and at all professional levels. A moderate teaching load allows time for quality research and close involvement with students. Our recent move into the Paul G. Allen Center for Computer Science & Engineering expands opportunities for new projects and initiatives. The Seattle area is particularly attractive given the presence of significant industrial research laboratories as well as a vibrant technology-driven entrepreneurial community that further enhance the intellectual atmosphere. Information about the department can be found on the web at <http://www.cs.washington.edu>.

We welcome applicants in all CSE research areas including both core and inter-disciplinary areas. We expect candidates to have a strong commitment both to research and to teaching. The department is primarily seeking individuals at the tenure-track Assistant Professor rank; however, under unusual circumstances and commensurate with the qualifications of the individual, appointments may be made at the rank of Associate Professor or Professor. We may also be seeking non-tenured research faculty at Assistant, Associate and Professor levels, postdoctoral researchers (Research Associates) and part-time and full-time annual lecturers and Sr. Lecturers. Applicants for both tenure-track and research positions must have earned a doctorate by the date of appointment; those applying for lecturer

positions must have earned at least a Master's degree.

Please apply online at:
<http://www.cs.washington.edu/news/jobs.html>

with a letter of application, a complete curriculum vitae, statement of research and teaching interests, and the names of four references.

Applications received by February 28, 2007 will be given priority consideration.

The University of Washington was awarded an Alfred P. Sloan Award for Faculty Career Flexibility in 2006. In addition, the University of Washington is a recipient of a National Science Foundation ADVANCE Institutional Transformation Award to increase the participation of women in academic science and engineering careers. We are building a culturally diverse faculty and encourage applications from women and minority candidates.

University of Waterloo David R. Cheriton School of Computer Science Tenure-Track Positions

The University of Waterloo invites applications for a tenured or tenure-track faculty position in the David R. Cheriton School of Computer Science, in the area of bioinformatics. Candidates at all levels of experience are encouraged to apply. Successful applicants who join the University of Waterloo are expected to develop and maintain a productive program of research, attract and develop highly qualified graduate students, provide a stimulating learning environment for undergraduate and graduate students, and contribute to the overall development of the School. A Ph.D. in Computer Science, or equivalent, is required, with evidence of excellence in teaching and research. Rank and salary will be commensurate with experience, and appointments are expected to commence during the 2007 calendar year.

With over 70 faculty members, the University of Waterloo's David R. Cheriton School of Computer Science is the largest in Canada. It enjoys an excellent reputation in pure and applied research and houses a diverse research program of international stature. Because of its recognized capabilities, the School attracts exceptionally well-qualified students at both undergraduate and graduate levels.

In addition, the University has an enlightened intellectual property policy which vests rights in the inventor; this policy has encouraged the creation of many spin-off companies including iAnywhere Solutions Inc., Maplesoft Inc. and Open Text Corp. Please see our website for more information: <http://www.cs.uwaterloo.ca>.

Applications should be sent by electronic mail to:

cs-recruiting@cs.uwaterloo.ca
or by post to:
Chair
Advisory Committee on Appointments
David R. Cheriton School of Computer Science
200 University Avenue West
University of Waterloo
Waterloo, Ontario N2L 3G1 Canada

An application should include a curriculum vitae, statements on teaching and research, and the names and contact information for at least three referees. Applicants should ask their referees to forward letters of reference to the address above. Applications will be considered as soon as possible after they are complete, and as long as positions are available.

The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

University of Waterloo David R. Cheriton School of Computer Science Tenure-Track Positions

The University of Waterloo invites applications for one or more David R. Cheriton Chairs in Software Systems in the David R. Cheriton School of Computer Science. Candidates at all levels of experience whose research is in the systems area (broadly defined) are encouraged to apply. Successful applicants who join the University of Waterloo are

Professional Opportunities

expected to be leaders in research, have an active graduate student program and contribute to the overall development of the School. A Ph.D. in Computer Science, or equivalent, is required, with evidence of excellence in teaching and research. Rank and salary will be commensurate with experience, and appointments are expected to commence during the 2007 calendar year. The positions will be tenured or tenure-track.

With over 70 faculty members, the University of Waterloo's David R. Cheriton School of Computer Science is the largest in Canada. It enjoys an excellent reputation in pure and applied research and houses a diverse research program of international stature. Because of its recognized capabilities, the School attracts exceptionally well-qualified students at both undergraduate and graduate levels. In addition, the University has an enlightened intellectual property policy which vests rights in the inventor: this policy has encouraged the creation of many spin-off companies including iAnywhere Solutions Inc., Maplesoft Inc., and Open Text Corp. Please see our website for more information: <http://www.cs.uwaterloo.ca>.

Applications should be sent by electronic mail to:

cs-recruiting@cs.uwaterloo.ca

or by post to:

Chair
Advisory Committee on Appointments
David R. Cheriton School of Computer Science
200 University Avenue West
University of Waterloo
Waterloo, Ontario N2L 3G1 Canada

An application should include a curriculum vitae, statements on teaching and research, and the names and contact information for at least three referees. Applicants should ask their referees to forward letters of reference to the address above. Applications will be considered as soon as possible after they are complete, and as long as positions are available.

The University of Waterloo encourages applications from all qualified individuals, including women, members of visible minorities, native peoples, and persons with disabilities. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

University of Waterloo Department of Electrical and Computer Engineering Faculty Positions

The Department of Electrical and Computer Engineering invites applications for faculty positions in most areas of computer engineering, software engineering, and nanotechnology engineering, and in VLSI/circuits, information security, photonics, MEMS, control/mechatronics, signal/image processing, and quantum computing. The University has been named the "Best Overall" university by reputation in Canada.

For more information and online application, please visit
<https://eceadmin.uwaterloo.ca/DACA>

University of Wisconsin-Madison Department of Biostatistics and Medical Informatics Assistant Professor, Image Analysis

University of Wisconsin, Madison, Department of Biostatistics and Medical Informatics has an Assistant Professor, Image Analysis (PVL #52423) tenure-track faculty opening for Summer/Fall of 2007.

Additional information and how to apply located at:

<http://www.biostat.wisc.edu>.
under overview/employment. Application deadline is February 15, 2007.
UW-Madison is an AA/EEO.

University of Wisconsin-Madison Biostatistics and Medical Informatics Faculty Positions

UW-Madison, Biostatistics and Medical Informatics has 2 tenure-track faculty positions Summer/Fall of 2007. Ph.D. in Computer Science, Biostatistics or related field required. Expertise in computational systems biology is desirable.

Submit c.v., research objectives statement, sample publications and 3 reference letters to:

Hiring Committee, PVL #54899
c/o Dept. of Biostatistics & Medical Informatics
K6/444 CSC, Box 4675
600 Highland Ave.
Madison, WI 53792-4675
More info: <http://www.biostat.wisc.edu>.
Deadline February 28, 2007.
UW-Madison is an AA/EEO.

Washington State University School of Electrical Engineering and Computer Science Bioinformatics/Computational Biology Faculty Position

The School of Electrical Engineering and Computer Science at Washington State University invites applications and nominations for a tenure-track position in bioinformatics/computational biology to begin January 2007 or later, at the level of assistant professor.

This position is part of a university-wide initiative to strengthen its programs in the application of computational approaches to various areas of biological science. Areas of research interest include but are not limited to development of statistical, theoretical, or computational approaches for interpreting biological, health, or medical data; mathematical models or computational techniques for the study of biological systems; or quantitative strategies for integrating diverse types of biological information and developing higher-level understanding of complex systems. Successful candidates will be expected to develop and maintain a vigorous research program supported by extramural funding, to

train graduate students, and to participate in graduate and undergraduate teaching.

Required:

Earned doctorate in Computer Science or related field by January 2007 and a record of research accomplishments in bioinformatics or computational biology.

Desired:

Ability to communicate effectively with both students and colleagues, record indicating outstanding abilities and potential in research and teaching, and interdisciplinary research experience.

Screening will begin October 17th, 2006. Qualified individuals are encouraged to send a letter of application addressing qualifications, a curriculum vitae, a statement of current and long-term research interests, and a statement of teaching experience and interests. Also arrange for four letters of reference that address research potential, teaching, and communication skills. Materials should be sent to:

B/CB Search Committee Chair
School of Electrical Engineering and Computer Science
Washington State University
P.O. Box 642752
Pullman, WA 99164-2752

or by email (PDF or text documents) to:
robbsinsj@eecs.wsu.edu.

Full Notice of Vacancy can be viewed at:
<http://www.hrs.wsu.edu/employment/FAPvacancies.asp?searchin=Faculty> (Search #4344).
Successful candidates will be expected to develop and maintain a vigorous research program supported by extramural funding, to

Professor and Department Chair

The Department of Electrical and Computer Engineering (ECE) at the University of Denver (DU) is seeking a dynamic and visionary individual from business or academia to lead the department during this expansion phase of the School of Engineering and Computer Science. In addition to our ABET accredited programs in electrical and computer engineering, we are expanding into mechatronics, bioengineering, molecular-scale engineering, and systems engineering. Our ECE department benefits from a top quality faculty, strong partnership with industry, and collaborations with three medical research centers in the Denver metro area. The primary focus of this new department chair will be on research and building of strong graduate programs. DU is a private university with a strong history of academic excellence, small classes, and emphasis on student engagement at all levels. DU is the oldest university in Colorado and its campus is located in the Denver metro area.

Individuals with a strong record of research, scholarship and excellence in teaching are encouraged to apply by emailing their resume, statement of interest, and a list of five references to hr-postings@du.edu. PhD in electrical or computer engineering and some level of leadership experience are required. The University of Denver is an AA/EEO.



UNIVERSITY OF
DENVER
SCHOOL OF ENGINEERING
AND COMPUTER SCIENCE

Wayne State University Department of Computer Science Tenure-Track Faculty Positions

The Department of Computer Science of Wayne State University invites applications for several tenure-track faculty positions at the Assistant/Associate Professor level. We are seeking applicants from all areas of Computer Science with preference for Software Engineering, Bioinformatics, Artificial Intelligence (data mining, computational linguistics, computer gaming) and Theory and Algorithms.

Candidates should have a Ph.D. in computer science or related area. A successful candidate will have a strong interest in and commitment to research and teaching, a strong publication record in their area, and show a potential for obtaining external research funding. Senior applicants should have strong publication and funding records.

The Department of Computer Science offers BS, MS and Ph.D. degrees. Federal and state agencies, as well as industry, support a variety of our research programs. Our graduate enrollment includes seventy Ph.D. students, the majority of whom are supported. The Department's total annual R&D expenditures average between \$3-4 million. Faculty actively maintain collaborative relationships with many other centers and departments within the university, including the School of Medicine, which is the largest single-campus medical school in the country.

Wayne State University, located in Detroit, Michigan's Cultural Center, is an urban

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Professional Opportunities

Carnegie-I public research university serving over 33,000 students. Many outstanding residential communities and some of the nation's top 5% school districts are nearby. The University offers excellent benefits and a competitive compensation package.

Submit applications online at:
<http://jobs.wayne.edu>.

Applicants should include a letter of intent, a statement of research and teaching interests, a CV, and contact information for at least three references. All applications received prior to January 8, 2007 will receive full consideration. However, applications will be accepted until the positions are filled.

Wayne State University is an equal opportunity/affirmative action employer.

Worcester Polytechnic Institute Robotics Engineering Program Professor and Program Director

The WPI Robotics Engineering Program is looking for an outstanding faculty member for a tenure-track position at the Associate Professor level to serve as the Program Director starting in the Fall of 2007. Candidates should have a PhD, extensive experience in Robotics, and demonstrated excellence in research and teaching.

The Robotics Engineering Program is a joint venture by the Computer Science, Electrical & Computer Engineering, and Mechanical Engineering Departments. The Program comprises over 20 associated faculty and staff from these departments, and plans to hire additional tenure-track faculty. Please refer to our web site at <http://www.wpi.edu/Academics/Majors/RBE/> for complete information.

The Program Director is expected to play an active role in all aspects of the curriculum of the Robotics Engineering Program, lead a vigorous externally funded research effort, develop external relations, and recruit additional faculty.

WPI is an elite national university with an enrollment of 3,700, including 1,000 graduate students. It has a core focus on engineering, science and the management of technology, and grants degrees at the Bachelor's, Master's and Doctoral levels in more than 30 disciplines. WPI's acclaimed and long-standing project-based undergraduate curriculum is singled out by professional societies as a model program. That curriculum, combined with a significant graduate program, offers faculty a unique balance between research and teaching.

WPI is in Worcester, Massachusetts, the second largest city in Massachusetts and the third largest in New England. It is approximately one hour from both Boston and Providence; cultural and recreational resources abound in the region. The UMass Medical Center and large number of technology companies, colleges, and universities in the immediate area make it ideal for dual career families.

To apply, submit detailed Research and Teaching Statements, curriculum vitae, and the names, postal addresses, and email addresses of at least five references. Applications and any questions about the hiring process should be addressed to:

robotics-recruit@wpi.edu.

For full consideration, applications should be received by 01/31/2007.

To enrich education through diversity, WPI is an affirmative action, equal opportunity employer.

Worcester Polytechnic Institute Computer Science Assistant Professor - Interactive Media and Game Development

Do you want the combination of a research university teaching load with a liberal arts college environment? Do you like engaging undergraduates together with graduates in long-term, open-ended projects? Would you enjoy doing interdisciplinary research, experiencing the interplay between technology and society, and helping students apply their technical skills in global settings? Would you like to help lead a new program in Interactive Media and Game Development? If so, you should consider joining the faculty at WPI.

The IMGD program, a collaborative venture by the Computer Science and Humanities & Arts Departments, is unique for its balance of technical and artistic elements. Currently in its second year, the program has 7 primary faculty members, 7 additional faculty members, and over 80 undergraduate majors. To support the program's growth, the Computer Science Department is looking for tenure-track faculty at the Assistant Professor level for the Fall of 2007 in the area of Interactive Media, including Multimedia and Game Development. Candidates should have a PhD in Computer Science or a closely related field, and the potential for excellence in research and teaching.

The CS Department grants BS, MS, and PhD degrees, and is among the largest at WPI, with 19 tenure-track faculty members and approximately 320 majors and 100 full-time MS and PhD students. We expect to maintain the exceptionally close-knit, collegial atmosphere we currently enjoy. Faculty research is funded by federal agencies (such as NSF, NIH, NSA, ONR, and DARPA) and industrial collaborators. Please refer to the CS and IMGD web sites at www.cs.wpi.edu and www.wpi.edu/Academics/Majors/IMGD/ for more information.

WPI is an elite national university with an enrollment of 3,800, including 1000 graduate students. It has a core focus on engineering, science and the management of technology, and grants degrees in more than 30 disciplines. WPI's acclaimed and long-standing project-based undergraduate curriculum is singled out by professional societies as a model program. That curriculum, combined with a significant graduate program, offers faculty a unique balance between research and teaching.

WPI is in Worcester, Massachusetts, the second largest city in Massachusetts and the third largest in New England. It is approximately one hour from both Boston and Providence; cultural and recreational resources abound in the region. The UMass Medical Center and large number of technology companies, colleges and universities in the immediate area make it ideal for dual career families.

Applications and questions about the hiring process should be sent to:

imgd-recruit@cs.wpi.edu.

Applications should include detailed research and teaching statements, vitae, and the names and addresses of at least three references. For full consideration, applications should be received by 01/31/2007.

To enrich education through diversity, WPI is an affirmative action, equal opportunity employer.

Wright State University Department of Computer Science & Engineering Tenure -Track Faculty Positions

The Department of Computer Science and Engineering at Wright State University seeks applicants for multiple tenure-track Assistant or Associate Professor positions. The Department resides in the College of Engineering and Computer Science and offers B.S., M.S. and Ph.D. degrees both in Computer Science and Computer Engineering. Candidates for these positions are expected to have an earned Ph.D. in computer science, computer engineering, or a closely related field and evidence of scholarship in that field appropriate to the position. Applicants for associate professor positions should have a distinguished record in computer science or computer engineering that demonstrates strong leadership in both research and teaching commensurate with the rank. Successful candidates will be expected to participate fully in the Department through research, teaching, and service. There is special interest in faculty specializing in data integration and analysis, Semantic Web, services and grid based distributed computing, embedded computing, hardware-software co-design, and operating systems; however, all high quality applicants will be considered regardless of their field of specialization.

The Computer Science and Engineering Department is one of four departments in the College of Engineering and Computer Science. The Department currently has 25 faculty members, more than 500 undergraduate majors, 90 M.S. and 40 Ph.D. students. It is housed in an attractive engineering building with fully networked Unix and Windows environments, an NCR5400 Teradata machine, and excellent research laboratories. The Department also receives special support for enhancement of its graduate program from the Ohio Board of Regents. Additional information about the programs and faculty of the Department as well as any update regarding this advertisement can be found at: <http://www.cs.wright.edu/cse>

Wright State University, an institution of 16,000 students, is located on a spacious campus with a significant area of protected green space in a growing high-technology suburban community. It is surrounded by commercial (NCR, Lexis-Nexis, Reynolds & Reynolds, MeadWestvaco, etc.) and government (Wright-Patterson Air Force Base) research and development facilities. The University is proactively committed to industrial and government partnerships for research and economic development ventures. In addition, the university has won a \$11M award from the State of Ohio to establish a Wright Center of Innovation for Advanced Data Management and Analysis, now housed in a new Joshi Research Center adjacent to the College of Engineering and Computer Science. A variety of affordable and pleasant living environments,

schools and parks, attractive to professionals and families, are conveniently located close to the campus. Wright State University is an AA/EEOC and has a strong institutional commitment to diversity. Therefore, we are particularly interested in receiving applications from a broad spectrum of professionals, including underrepresented groups, women, persons with disabilities, and veterans. Applications from couples who have independent research programs are invited.

Applicants should clearly indicate the rank for which they are applying, and should provide a brief statement of their research and teaching interests and goals. The application should include a complete vitae with the names, addresses, telephone numbers, and e-mail addresses of at least three references, plus any additional supporting information. Salaries are highly competitive. Send applications and supporting information to:

Chair
 Tenure-Track Faculty Search Committee
 Department of Computer Science & Engineering
 3640 Colonel Glenn Hwy
 Wright State University
 Dayton, OH 45435

Consideration of candidates starts January 15, 2007 and continues each month until May 15, 2007. For details and information, you may call (937) 775-5134 or contact Forouzan Golshani, NCR Distinguished Professor and Chair, <mailto:golshani@wright.edu>

Wright State University is an equal opportunity/affirmative action employer.

Yale University Computer Science Department Faculty Positions

The Yale Computer Science Department intends to hire one or more highly qualified candidates for junior faculty positions beginning in the 2007-2008 academic year, in the areas of databases, networking, operating systems, and/or system security. Applicants are expected to excel in both research and teaching. They will find many opportunities for research collaborations both inside and outside the Computer Science department. Interdisciplinary work is encouraged, with Yale's world-class faculty in such computationally active fields as biology, chemistry, economics, engineering, geophysics, management, mathematics, medicine, psychology, physics, and statistics. Yale faculty regularly have the opportunity to teach excellent students, both graduate and undergraduate, in relatively small classes.

Candidates must hold a Ph.D. in computer science or related discipline. Applications submitted by January 15, 2006 will be given highest priority. We encourage applications from women and minority scholars.

Yale is an affirmative action/equal opportunity employer. Our home page may be found at www.cs.yale.edu.

Send vitae and have at least three letters of reference sent to:

faculty-recruiting@cs.yale.edu

or to:

Faculty Recruiting Committee
 Department of Computer Science
 Yale University
 P.O. Box 208285
 New Haven, CT 06520-8285
 Questions may be directed to:
faculty-recruiting@cs.yale.edu.



FACULTY POSITION Department of Systems and Information Engineering

ASSISTANT, ASSOCIATE OR FULL PROFESSOR - Applications are being accepted for a tenure track faculty position at all ranks. Candidates must possess a Ph.D. in Systems Engineering or related engineering fields. The successful candidate will be expected to develop a quality research program in Systems Engineering in the area(s) of Computational Statistics and Simulation, Human Factors, Optimization and Control, Risk and Decision Analysis and Systems Integration and to teach and advise graduate and undergraduate students.

Please send a complete vita, publications list, research summary, and the names, addresses, and telephone numbers of four references to: **Jill Bratton, Department of Systems and Information Engineering, P.O. Box 400747, Charlottesville, VA 22904-4747**, or please e-mail: jrb3ej@virginia.edu

The position will remain open until filled.

The Department of Systems and Information Engineering is dedicated to the goal of building a culturally diverse and pluralistic faculty committed to teaching and working in a multicultural environment, and strongly encourages applications from minorities and women.

The University of Virginia is an Equal Opportunity/ Affirmative Action Employer.

New CRA Academic Members

- George Washington University - CS
- Mount Holyoke College - CS
- North Dakota State University - CSOR
- University of British Columbia - CS
- University of Missouri, Kansas City - CS
- University of Texas, Austin - ECE
- Villanova University - CS