

The Computing Community Consortium Catalyzing and Enabling Computing Research

Susan Graham
Chair

Gregory D. Hager
Vice-Chair

Ann Drobniś
Director

An Overview of the Computing Community Consortium

- A standing committee of the Computing Research Association founded in 2006
- Funded by NSF under a Cooperative Agreement
- Facilitates the development of a bold, multi-themed vision for computing research - and communicates this vision to stakeholders
- Led by a broad-based Council
- Staffed by CRA



Our Mission

The **mission** of Computing Research Association's Computing Community Consortium (CCC) is to:

catalyze the computing research community and
enable the pursuit of innovative, high-impact research.

CCC conducts activities that

strengthen the research community,
articulate compelling **research visions**, and
align those visions with pressing **national and global challenges**.

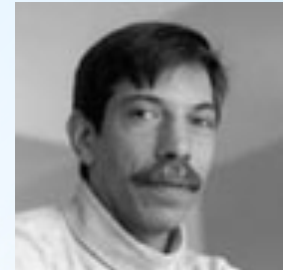
CCC **communicates** the importance of those visions to **policymakers**, government and **industry stakeholders**, the **public**, and the **research community** itself.

The CCC Council

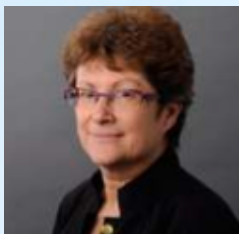


■ Executive Committee

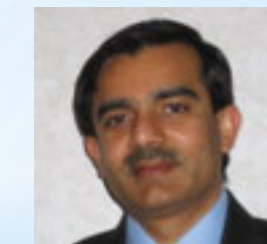
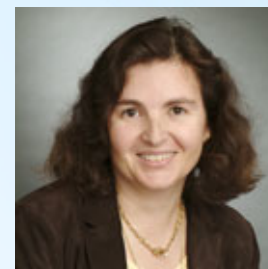
- Susan Graham, UC Berkeley (Chair)
- Greg Hager, Johns Hopkins (Vice Chair)
- Ed Lazowska, U. Washington (Past Chair)
- Elizabeth Mynatt, Georgia Tech
- Fred Schneider, Cornell
- Sue Davidson, Univ. Pennsylvania
- Ann Drobnis, Director
- Andy Bernat, CRA Executive Director



The CCC Council



- Terms ending 6/2016
 - Randy Bryant, CMU
 - Limor Fix, Intel
 - Mark Hill, U. Wisconsin, Madison
 - Tal Rabin, IBM Research
 - Daniela Rus, MIT
 - Ross Whitaker, Univ. Utah
- Terms ending 6/2015
 - Liz Bradley, Univ. Colorado
 - Joe Evans, Univ. Kansas
 - Ran Libeskind-Hadas, Harvey Mudd
 - Shashi Shekhar, Univ. Minnesota
- Terms ending 6/2014
 - Deborah Crawford, Drexel
 - Anita Jones, Univ. Virginia
 - Bob Sproull, Sun Labs Oracle (ret.)
 - Josep Torrellas, Univ. Illinois



The CCC Council - Past Members

- Greg Andrews, Univ. Arizona
- Bill Feiereisen, LANL
- Stephanie Forrest, Univ. New Mexico
- Lance Fortnow, Georgia Tech
- Eric Horvitz, Microsoft Research
- Chris Johnson, Univ. Utah
- Frans Kaashoek, MIT
- Dave Kaeli, Northeastern
- Dick Karp, UC Berkeley
- John King, Univ. Michigan
- Hank Korth, Lehigh
- Peter Lee, Carnegie Mellon
- Andrew McCallum, Umass
- John Mitchell, Stanford
- Robin Murphy, Texas A&M
- Margo Seltzer, Harvard
- Karen Sutherland, Augsburg College
- Dave Waltz, Columbia

What Distinguishes CCC?

- **Proactive, rapid response**
 - Identify, plan, and execute in a matter of weeks to months
- **Community-based**
 - Find and foster ideas from germination to fruition and beyond
- **Leadership incubator**
 - Everyone is expected to do something!

A Multitude of Activities

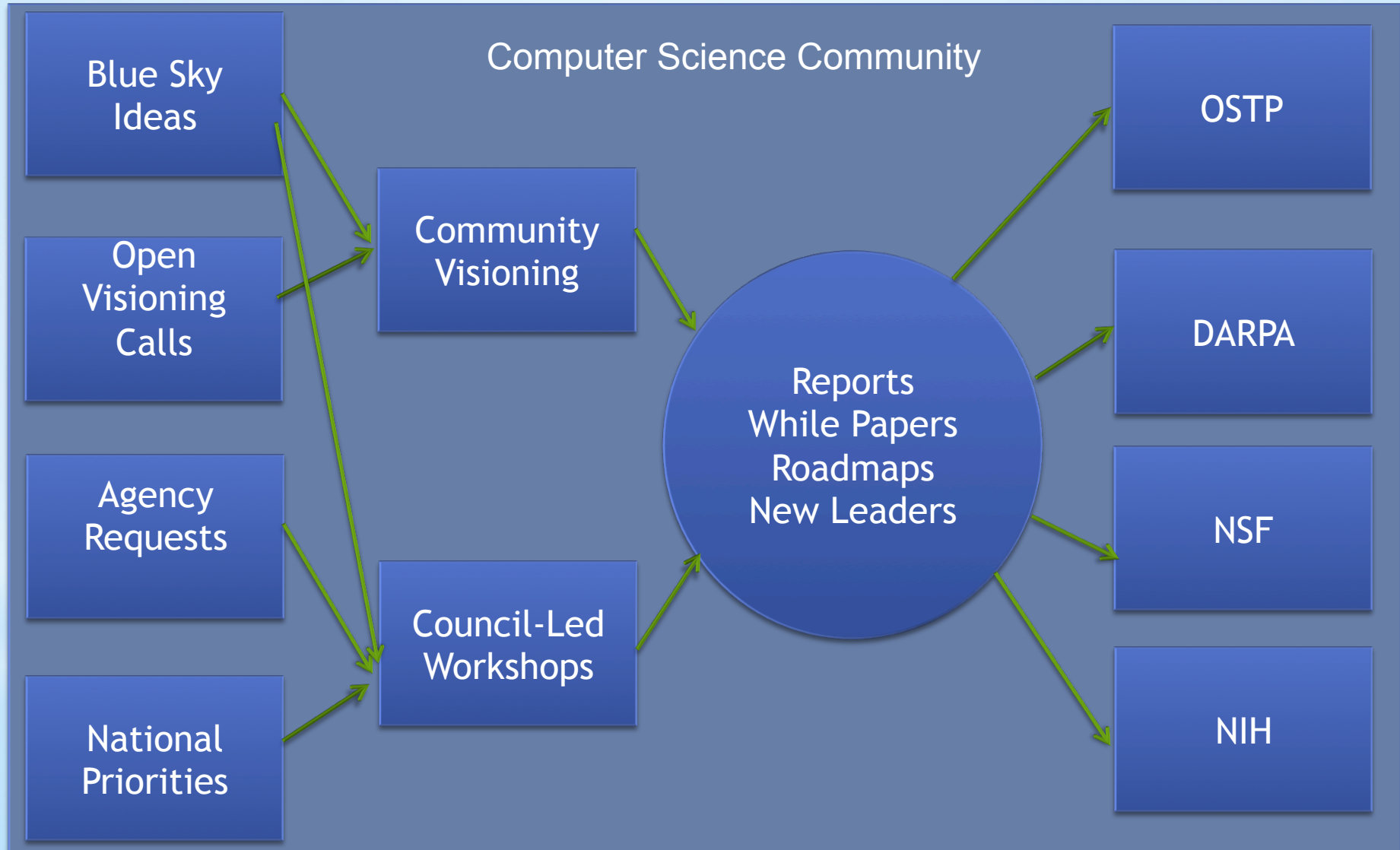
- **Community-initiated visioning:**
 - Workshops to discuss “out-of-the-box” ideas
 - Blue Sky Idea tracks at conferences
- **Outreach to White House, funding agencies:**
 - Outputs of visioning activities
 - Short reports to inform policy makers
 - Task Forces - Health IT, Data Analytics, Education



- **Public relations efforts:**
 - Library of Congress symposia
 - Research “Highlight of the Week”
 - CCC Blog [<http://cccblog.org/>]
- **Nurturing the next generation of leaders:**
 - Computing Innovation Fellows Project
 - “Landmark Contributions by Students”
 - Leadership in Science Policy Institute
 - Computing Research in Action videos



Visioning Activities



Catalyzing: Blue Sky Ideas Conference Tracks

- Special tracks at major research conferences organized by faculty, graduate students, postdocs
- CCC provides prizes to three Best Papers
- “Reach out beyond the usual research papers that present completed work to seek out papers that present ideas and visions that can stimulate the research community to pursue new directions”
- Past Year:
 - 13th International Conference on Autonomous Agents and Multiagent Systems (AAMAS)
- Coming Year:
 - 22nd ACM International Symposium on Foundations of Software Engineering (SIGSOFT)
 - 29th Association for the Advancement of Artificial Intelligence Conference (AAAI-15)



Catalyzing: Visioning Activities

- Over 20 Workshops to date
- More than 1,500 participants

Extreme Scale Design Automation
Sustainability & IT Financial Cyberinfrastructure
Computing and Healthcare Privacy R&D
Cyber-physical systems Spatial Computing
Big Data Computing ROBOTICS
Disaster Management Online Education
Free & Open Source Software
Learning Technologies Global Development

Catalyzing and Enabling: Big Data

Big-Data Computing: Creating breakthroughs in commerce,

Randal E. Bryant
Carnegie Mellon University

Randy H. Katz
University of California, Berkeley

Version 8: December

Motivation: Our Data-Driven World

Advances in digital sensors, communications, computer collections of data, capturing information of value to society. For example, search engine companies such created an entirely new business by capturing the information from the Web and providing it to people in useful ways. Bytes of data every day and continually add new services, directions, and image retrieval. The societal benefits having transformed how people find and make use of information.

Just as search engines have transformed how we access data computing can and will transform the activities of medical practitioners, and our nation's defense and intelligence.

- Wal-Mart recently contracted with Hewlett Packard capable of storing 4 petabytes (4000 trillion bytes) at their 6000 stores worldwide. By applying analytics can detect patterns indicating the effectiveness of campaigns, and better manage their inventory and supply chain.
- Many scientific disciplines have become data-driven. The Large Hadron Collider (LHC) will scan the sky from a mountain top. Astronomers will apply massive data sets to the origins of our universe. The Large Hadron Collider will revolutionize our understanding of the workings of the universe. The Large Hadron Collider (LHC) will revolutionize our understanding of the workings of the universe. The Large Hadron Collider (LHC) will revolutionize our understanding of the workings of the universe.

¹ For the most current version of this essay, as well as related essays, see <http://cra.org/ccc>.

CCC
COMPUTING RESEARCH COMMUNITY CONSORTIUM

A CATALYST AND ENABLER for the computing research community

ABOUT VISIONING LEADERSHIP DEVELOPMENT NATIONAL PRIORITIES

VISIONING ACTIVITIES

HUMAN COMPUTATION
MID-SCALE INFRASTRUCTURE
ESDA
PRIVACY R&D
ONLINE EDUCATION
SA-TS
HEALTH IT
SPATIAL COMPUTING
DISASTER MANAGEMENT
INTERACTIVE TECHNOLOGY
RISES
ARCHITECTURE
GLOBAL DEVELOPMENT
CROSS-LAYER RELIABILITY
LEARNING TECHNOLOGY
OPEN SOURCE SOFTWARE
CYBER-PHYSICAL SYSTEMS
NETWORK SCIENCE AND ENGINEERING
ROBOTICS
THEORETICAL COMPUTER SCIENCE
BIG DATA COMPUTING

BIG-DATA COMPUTING STUDY GROUP

Under sponsorship by the CCC, the Big-Data Study Group explores applications of high-performance, data-intensive computing systems from astronomy to machine translation. To begin this effort, two workshops were held in 2008.

Leads for this workshop and for effort

Randy Bryant (Carnegie Mellon University) and Thomas Kwan (University of Washington)

CCC council liaison for this workshop and effort

Ed Lazowska (University of Washington)

Hadoop Summit

(2008-08, Sunnyvale, CA) | Speakers, Slides and Videos

Hadoop is an open source project developing software that enables distributed systems. It includes a distributed file system and programmatic interfaces for expressing both element-wise and aggregate computations.

Data-Intensive Computing Symposium

(2008-08, Sunnyvale, CA) | Speakers, Slides and Videos

This symposium covered a broad range of topics, with presentations of data-intensive computing, including systems, programs, and applications.

Participants Resources Related Events

Data-Intensive Scalable Computing in Education (DISC 2008)

July 16 - 18, 2008, University of Washington, Seattle, WA

Cloud Computing and Its Applications 2008 (CCA-08)

October 22-23, 2008, Gleacher Center, Chicago, Illinois

CREATING VISIONS FOR COMPUTING RESEARCH

CCC-LED WHITE PAPERS

Big Data and National Priorities

From Data to Knowledge to Action: A Global Enabler for Big Data

September 11, 2010
Eric Horvitz, Microsoft Research and Tom Mitchell, Carnegie Mellon University

Enabling the Smart Grid

September 21, 2010
Randal E. Bryant, Carnegie Mellon University, Randy H. Katz, UC Berkeley, California, and Erwin P. Gnanapandian, Computing Research Association

Enabling Evidence-Based Healthcare

September 16, 2010
Eric Horvitz, Microsoft Research

Enabling a Revolution in New Transportation

September 11, 2010
Sebastian Thrun, Stanford University, Chase Hensel, Computing Research Association and Erwin P. Gnanapandian, Computing Research Association

Enabling Personalized Education

September 2, 2010
Beverly Park Woolf, University of Massachusetts-Amherst, Ryan Baker, Worcester Polytechnic Institute, and Erwin P. Gnanapandian, Computing Research Association

Enabling an Initiative in "New Biology"

August 1, 2010
Chase Hensel, Computing Research Association and Erwin P. Gnanapandian, Computing Research Association

Enabling Advanced Intelligence and Decision-Making for Big Data

July 28, 2010
Randal E. Bryant, Carnegie Mellon University, Jaime G. Carbonell, Carnegie Mellon University

Enabling 21st Century Discovery in Science and Engineering

June 18, 2010
Randal E. Bryant, Carnegie Mellon University and Ed Lazowska, University of Washington

Office of Science and Technology Policy
Executive Office of the President
New Executive Office Building
Washington, DC 20502

FOR IMMEDIATE RELEASE
March 29, 2012

Contact: Rick Weiss 202 456-6037 rweiss@ostp.eop.gov
Lisa-Joy Zgorski 703 292-8311 lzgj@ostp.eop.gov

OBAMA ADMINISTRATION UNVEILS "BIG DATA" INITIATIVE: ANNOUNCES \$200 MILLION IN NEW R&D INVESTMENTS

Aiming to make the most of the fast-growing volume of digital data, the Obama Administration today announced a "Big Data Research and Development Initiative." By improving our ability to extract knowledge and insights from large and complex collections of digital data, the initiative promises to help solve some of the Nation's most pressing challenges.

To launch the initiative, six Federal departments and agencies today announced more than \$200 million in new commitments that, together, promise to greatly improve the tools and techniques needed to access, organize, and glean discoveries from huge volumes of digital data.

"In the same way that past Federal investments in information-technology R&D led to dramatic advances in supercomputing and the creation of the Internet, the initiative we are launching today promises to transform our ability to use Big Data for scientific discovery, environmental and biomedical research, education, and national security," said Dr. John P. Holdren, Assistant to the President and Director of the White House Office of Science and Technology Policy.

To make the most of this opportunity, the White House Office of Science and Technology Policy (OSTP)—in concert with several Federal departments and agencies—created the Big Data Research and Development Initiative to:

- Advance state-of-the-art core technologies needed to collect, store, preserve, manage, analyze, and share huge quantities of data.
- Harness these technologies to accelerate the pace of discovery in science and engineering, strengthen our national security, and transform teaching and learning; and
- Expand the workforce needed to develop and use Big Data technologies.

1

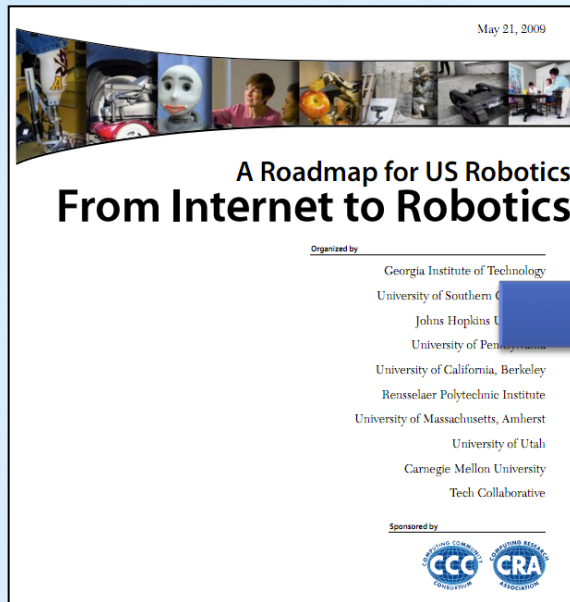
2008

2008

2010

2012

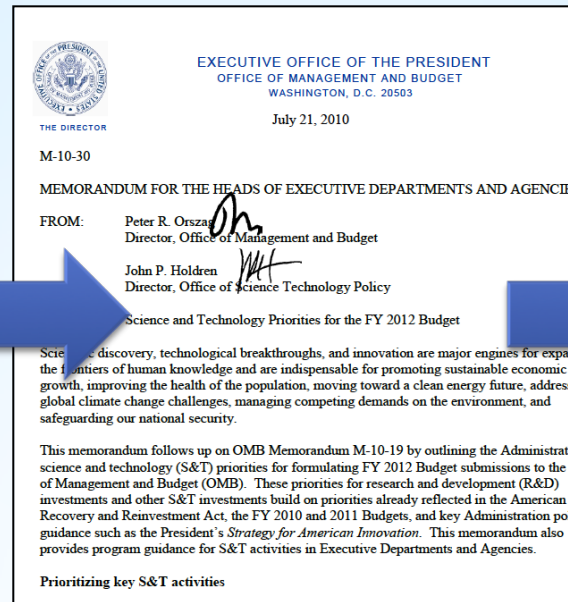
Catalyzing and Enabling: Robotics



4 meetings during
summer 2008

Roadmap published
May 2009

*Extensive discussions
between visioning
leaders & agencies*



OSTP issues directive to all
agencies in summer 2010
to include robotics in
FY 12 budgets



National Robotics
Initiative announced
in summer 2011

Henrik Chistensen
Georgia Tech



Catalyzing and Enabling: Architecture

<p>Workshop on Advancing Computer Architecture Research (ACAR-1)</p> <p>Failure is not an Option: Popular Parallel Programming</p> <p>Organizers: Josep Torrellas (University of Illinois) and Mark Oskin (University of Washington).</p> <p>Steering Committee: Chita Das (NSF and Pennsylvania State University), William Harrod (DARPA), Mark Hill (University of Wisconsin), James La (Microsoft Research), Margaret Martonosi (Princeton University), Jose Ma (IBM Research), and Kunle Olukotun (Stanford University).</p> <p>Written by: Josep Torrellas, Mark Almadena Chitcheikamova, Chita Das, Jon Hiller, Sampath Kannan, Krish Richard Murphy, Onur Mutlu, Sati Anand Sivasubramanian, Kevin Skadron, Karin Strauss, Steven Swar Dean Tullsen.</p> <p>Funded by the Computing Research Association's (CRA) Computing Co Consortium (CCC) as a "visioning exercise" meant to promote forward thinking in computing research and then bring these ideas to a funded program.</p> <p>Held on February 21-23, 2010 in San Diego, California Contact: torrella@illinois.edu, oskin@cs.washington.edu Websites: http://www.cra.org/ccc/acar.php, http://iacoma.cs.uiuc.edu/acar/</p> <p>August 2010</p>	<p>Workshop on Advancing Computer Architecture Research (ACAR-II)</p> <p>Laying a New Foundation for IT: Computer Architecture for 2025 and Beyond</p> <p>Organizers: Mark Oskin (University of Washington) and Josep Torrellas (University of Illinois).</p> <p>Steering Committee: Chita Das (Pennsylvania State University), M (University of Wisconsin), James Larus (Microsoft Research), Margaret Martonosi (Princeton University), Jose Moreira (IBM Research), and Olukotun (Stanford University).</p> <p>Written by: Mark Oskin, Josep Torrellas, Chita Das, John Davis, Sa Dwarkadas, Lieven Eeckhout, Bill Feiereisen, Daniel Jimenez, Mark Martha Kim, James Larus, Margaret Martonosi, Onur Mutlu, Kunle Andrew Putnam, Tim Sherwood, James Smith, David Wood, Craig</p> <p>Funded by the Computer Research Association's (CRA) Computing Co Consortium (CCC) as a "visioning exercise" meant to promote forward thinking in computer research a program.</p> <p>Held on September 20-21, 2010 in Seattle, Washington Contact: oskin@cs.washington.edu, torrella@illinois.edu Website: http://www.cra.org/acar.php</p>	<p>21st Century Computer Architecture</p> <p><i>A community white paper</i></p> <p>May 25, 2012</p> <p>1. Introduction and Summary</p> <p>Information and communication technology (ICT) is transforming our world healthcare, education, science, commerce, government, defense, and entertainment to remember that 20 years ago the first step in information search involved a trip to 10 years ago social networks were mostly physical, and 5 years ago Twitter cartoon characters.</p> <p>Importantly, much evidence suggests that ICT innovation is accelerating with many visions moving from science fiction toward reality. Appendix A both touches upon and seeks to distill their attributes. Future visions include personalized medicine to aid homeland security, and telepresence to reduce the greenhouse gases spent on Future applications will increasingly require processing on large, heterogeneous "Data", using distributed designs, working in concert with the cloud, and deployment with efficient operation.</p> <p>Two key—but often invisible—enablers of technology and computer architecture. So transitions (Moore's Law) for roughly 40 Computer architects took these rapid transitions to design more powerful techniques to scale processor performance and mitigate memory system losses. effect of technology and architecture has provided ICT innovators with exponential growth at near constant cost.</p> <p>Because most technology and computer architecture innovations were (intentionally) higher layers, application and other software developers could reap the benefits of it without engaging in it. Higher performance has both made more computationally applications feasible (e.g., virtual assistants, computer vision) and made less applications easier to develop by enabling higher-level programming abstractions (e.g., languages and reusable components). Improvements in computer system cost-enabled value creation that could never have been imagined by the field's four distributed web search sufficiently inexpensive so as to be covered by advertising line</p> <p>¹ PCAST, "Designing a Digital Future: Federally Funded Research and Development Networking and Technology, Dec. 2010 (http://www.whitehouse.gov/sites/default/files/microsites/pcast/pcast-report-2010.pdf)</p> <p>² CCC, "Challenges and Opportunities with Big Data," Feb. 2012 (http://www.cra.org/ccc/whitepapers)</p>	<p>Exploiting Parallelism and Scalability (XPS)</p> <p>PROGRAM SOLICITATION NSF 13-507</p> <p>National Science Foundation Division for Computer & Information Science & Engineering Division of Computing and Communication Foundations Division of Information & Intelligent Systems Division of Computer and Network Systems Office of Cyberinfrastructure</p> <p>Full Proposal Deadline(s) (due by 5 p.m. proposer's local time): February 20, 2013</p> <p>IMPORTANT INFORMATION AND REVISION NOTES</p> <p>A revised version of the NSF Proposal & Award Policies & Procedures Guide (PAPPG), NSF 13-1, was issued on October 4, 2012 and is effective for proposals submitted, or due, on or after January 14, 2013. Please be advised that the guidelines contained in NSF 13-1 apply to proposals submitted in response to this funding opportunity. Proposers who opt to submit prior to January 14, 2013, must also follow the guidelines contained in NSF 13-1.</p> <p>Please be aware that significant changes have been made to the PAPPG to implement revised review criteria based on the National Science Board (NSB) report, "National Science Foundation's Broad Review Criteria: Review and Revision." While the two most recent criteria remain unchanged (Intellectual Merit and Broader Impacts), guidance has been provided to clarify and improve the function of the criteria. Changes will affect the project summary and project description sections of proposals. Annual and final reports also will be affected.</p> <p>A by-chapter summary of this and other significant changes is provided at the beginning of both the <i>Grant Proposal Guide</i> and the <i>Proposal & Award Policies & Procedures Guide</i>.</p> <p>Please note that this program solicitation may contain supplemental proposal preparation guidance and/or guidance that deviates from the guidelines established in the <i>Grant Proposal Guide</i>.</p> <p>SUMMARY OF PROGRAM REQUIREMENTS</p> <p>General Information</p> <p>Program Title: Exploiting Parallelism and Scalability (XPS)</p> <p>Synopsis of Program: Computing systems have undergone a fundamental transformation from the single processor devices of the turn of the century to today's ubiquitous and networked devices and warehouse-scale computing via the cloud. Parallelism has become ubiquitous at many levels. The proliferation of multi- and many-core processors, ever-increasing numbers of interconnected high performance and data intensive edge devices, and the data centers servicing them, is enabling a new set of global applications with large economic and social impact. At the same time, this means that the ability to achieve predictable performance improvements through improved processor technologies has eroded.</p> <p>The Exploiting Parallelism and Scalability (XPS) program aims to support groundbreaking research leading to a new era of parallel computing. XPS seeks research in evaluating, and possibly re-designing, the traditional computer hardware and software stacks for today's heterogeneous parallel and distributed systems, and exploring new hybrid approaches to parallelism and scalability. Advancing the needed breakthroughs will require a collaborative effort among researchers representing all areas, from the application layer down to the micro-architecture, and will be built on the principles and new foundational principles, have approaches to optimize scalable performance and usability need new abstract models and algorithms, programming models and languages, hardware architectures, compilers, operating systems and on-line systems, and exploit design and application-specific knowledge. Research should also focus on energy- and communication-efficiency and on enabling the design of efficient heterogeneous devices and clouds.</p> <p>Principal Program Officer(s): Please note that the following information is current at the time of publishing. See program website for any updates to the points of</p>
---	--	---	--

2010

2010

2012

2013



Josep Torrellas
UIUC



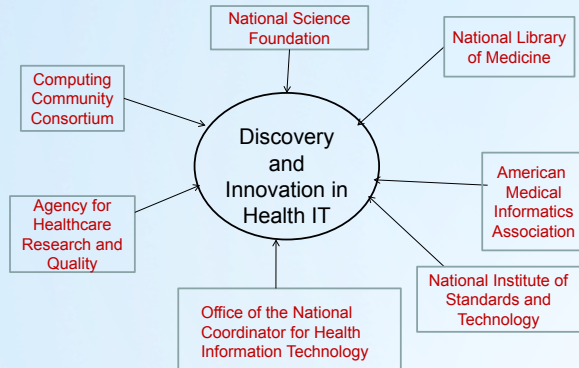
Mark Oskin
Washington



Mark Hill
Wisconsin

Catalyzing and Enabling: Health IT

October 2009 Workshop



National Science Foundation
WHERE DISCOVERIES BEGIN

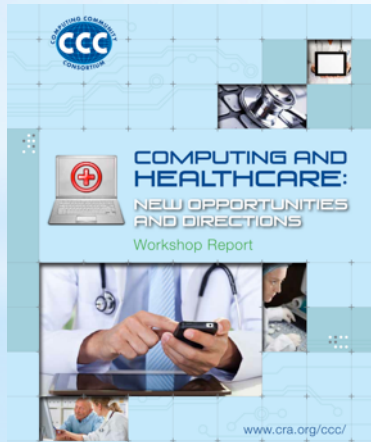
Directorate for Computer & Information Science & Engineering

SMART HEALTH AND WELLBEING (SHW)

CONTACTS

See program guidelines for contact information.

SYNOPSIS



Smart and Connected Health (SCH)

PROGRAM SOLICITATION

NSF 13-543

REPLACES DOCUMENT(S):

NSF 12-512



National Science Foundation

Directorate for Computer & Information Science & Engineering
Division of Computing and Communication Foundations
Division of Computer and Network Systems
Division of Information & Intelligent Systems

Directorate for Engineering

Directorate for Social, Behavioral & Economic Sciences



National Institutes of Health

October 2012 Workshop

Catalyzing and Enabling: Upcoming Workshops

- Visioning Workshops:
 - Human Computation Roadmap
 - Uncertainty in Computation
- BRAIN
- Aging in Place

Catalyzing and Enabling: Upcoming Workshops

- Computing Visions 2025

- Joint Venture of NSF CISE Advisory Committee and CCC

- 3 Initial Workshops:

- Interacting with the Computers All Around Us

- Look at how technology could change how computers interface with people and the world around them.

- New Renaissance of Indy Manufacturing: Programmable Matter and Things

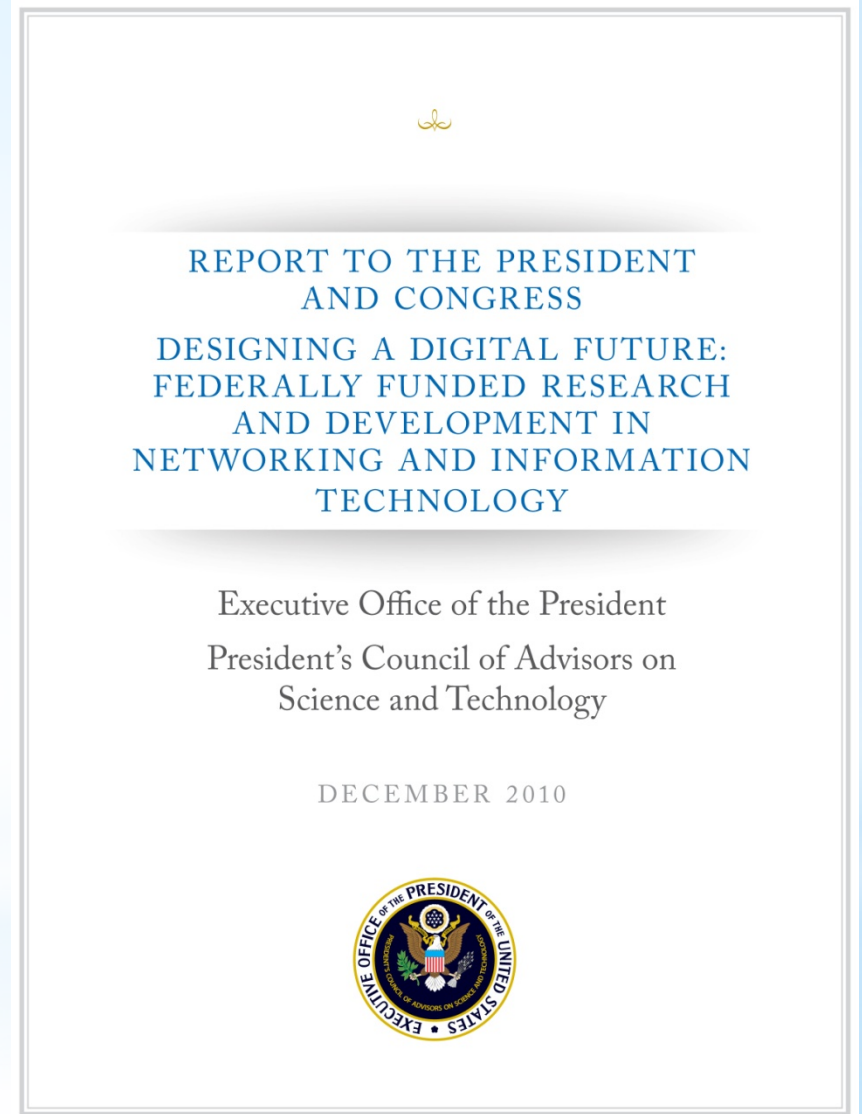
- Explore the way items are designed, manufactured, and delivered

- Computing and the Smart World

- Look at the massive amounts of data and advanced analytical techniques to “make the world smart”

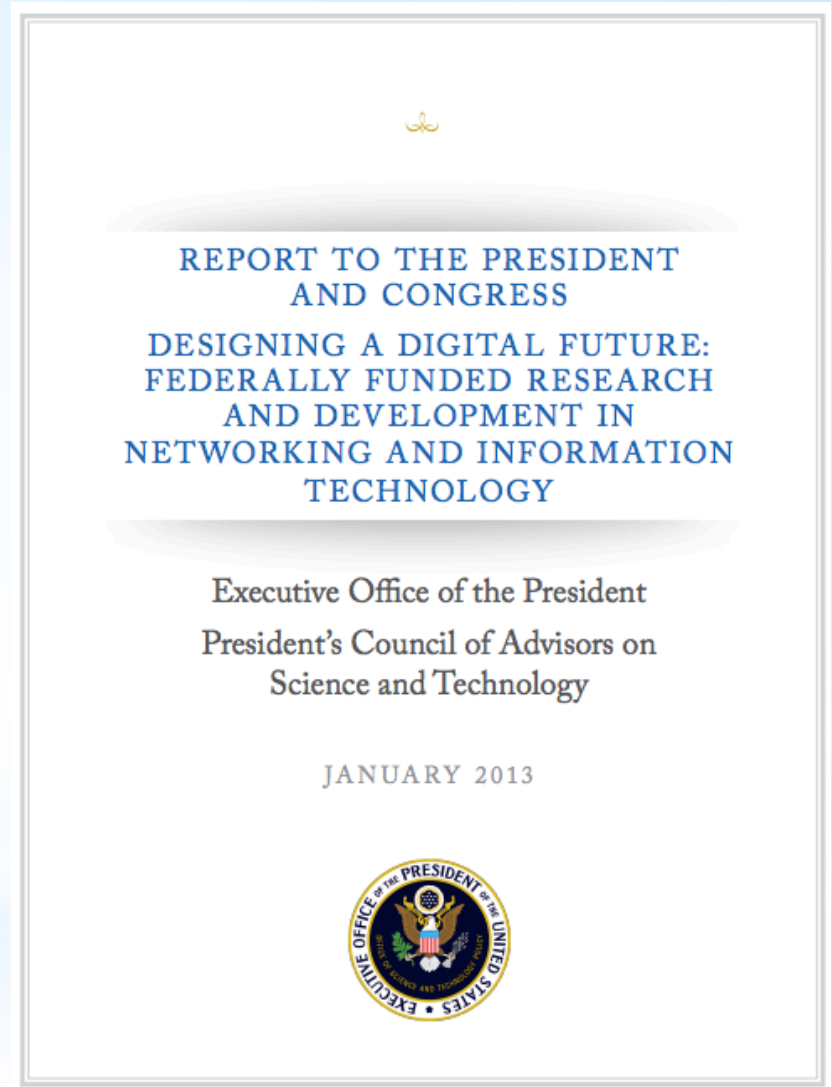
Communicating: PCAST NITRD Report - 2010

- 1/3 of the PCAST NITRD Working Group members were CCC Council members
- The report drew extensively on CCC White Papers
- An excellent roadmap for the field



Communicating: PCAST NITRD Report - 2013

- ¼ Contributing Members were CCC Council Members
- An excellent review of progress from 2010 report
- The challenge now: continuing to translate it into action



Communicating: NITRD Symposium (2/16/2012)



Communicating: Computing Research in Action



- Ubiquitous Computing Lab at the University of Washington
- SmartGeo at the Colorado School of Mines
- Vehicle-to-Grid at the University of Delaware
- In production: Integrating Robots with Tactical SWAT Teams at Mississippi State University


Communicating: Leadership in Science Policy Inst.(November 2011, April 2013)



The screenshot shows the website for the Computing Community Consortium (CCC) Leadership in Science Policy Institute. The header features the CCC logo, the tagline "A CATALYST AND ENABLER for the computing research community", and navigation links for "CCC Blog", "Contact", and social media. The main navigation bar includes "ABOUT", "VISIONING", "LEADERSHIP DEVELOPMENT", "NATIONAL PRIORITIES", "RESOURCES", and "EVENTS". The "LEADERSHIP IN SCIENCE POLICY INSTITUTE" section is highlighted, with a sub-header "LEADERSHIP IN SCIENCE POLICY INSTITUTE". Below this, a paragraph describes the institute's mission: "As part of its mission to develop a next generation of leaders in the computing research community, CRA's Computing Community Consortium (CCC) holds the CCC Leadership in Science Policy Institute (LISPI), intended to educate computing researchers on how science policy in the U.S. is formulated and how our government works." A photograph of the U.S. Capitol building is shown. Below the photo, a paragraph states: "LISPI is centered around a two day workshop and features presentations and discussions with science policy experts, current and former HILL staff, and relevant agency and Administration personnel about mechanics of the legislative process, interacting with agencies, advisory committees, and the federal case for computing." A list of expectations for LISPI participants is provided: "LISPI participants are expected to: • complete a reading assignment and a short written homework prior to attending the workshop, so that time spent at the workshop can focus on more advanced content, • attend the workshop, which includes breakfast and lunch, as well as a reception with the speakers and invited guests at the conclusion of the day, and • complete a small-group assignment afterwards that puts to use the workshop content on a CCC-inspired problem – perhaps writing an argument in favor of particular initiative for an agency audience, or drafting sample testimony on a CCC topic." A final paragraph states: "LISPI is not intended for individuals who wish to undertake research on science policy, become science policy fellows, or take permanent positions in Washington, DC. Rather, the goal is to reach work-a-day academics who appreciate that our field must be engaged in helping government."



Communicating: CCC Blog



The Computing Community Consortium Blog

A Service for the Computing Research Community

[Home](#) | [Site Admin](#) | [Log out](#)


[Home](#) | [About the CCC](#) | [About this blog](#)

Search

"Improving Brain-Computer Interfaces"

October 17th, 2011 by [Erwin Gianchandani](#) | [Edit this entry](#) 0 Comments and 3 Reactions


A [Science Nation](#) story published today describes a public-private partnership funded in part by the [National Science Foundation \(NSF\)](#) that is attempting to link mind and machine to ultimately improve the living conditions of those with "locked-in syndrome" — a malady in which people with normal cognitive brain activity suffer severe paralysis, often from injuries or an illness such as Lou Gehrig's disease.



From the [Science Nation](#) article (see a video after the jump!):


» [Read more: "Improving Brain-Computer Interfaces"](#)

Posted in [big science](#) , [research horizons](#) , [research news](#) 0 Comments and 3 Reactions




SUBSCRIBE VIA E-MAIL

Enter your email address:



SUBSCRIBE

to the CCC Blog Feed



LATEST TWEET

"Improving Brain-Computer Interfaces"
<http://t.co/SrgTEr8A>
Follow CCC on twitter here.

RECENT POSTS

- ["Improving Brain-Computer Interfaces"](#)
- [Administration Seeking Input on National Bioeconomy Blueprint](#)
- [First Person: "One of My Most Exciting Internship Experiences"](#)
- [Announcing the 2011 Computing Innovation Fellows](#)
- [Susan Graham to Receive Ken Kennedy Award](#)

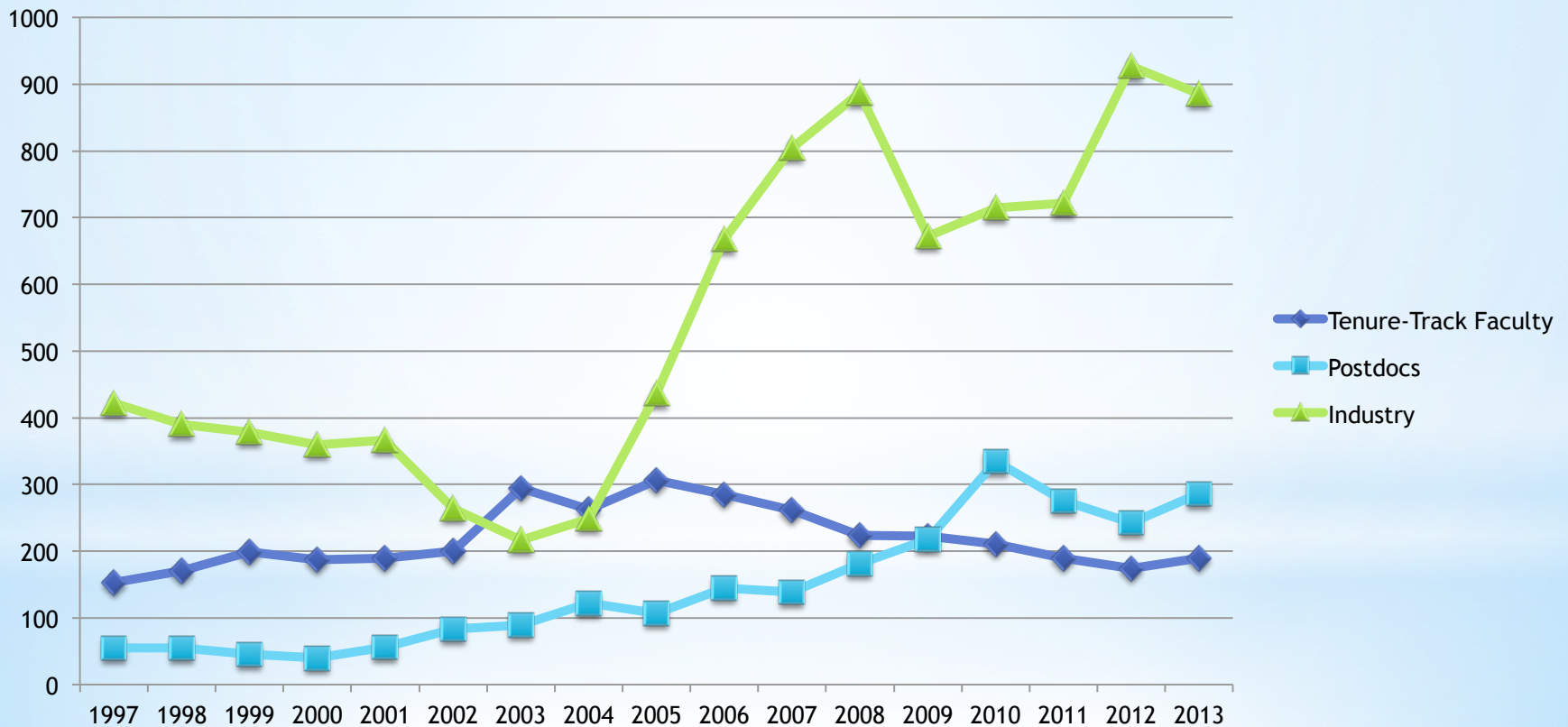
MOST READ POSTS

- ["Improving Brain-Computer Interfaces" \(22\)](#)
- [Administration Seeking Input on National Bioeconomy Blueprint \(15\)](#)
- [Announcing the 2011 Computing Innovation Fellows \(4\)](#)

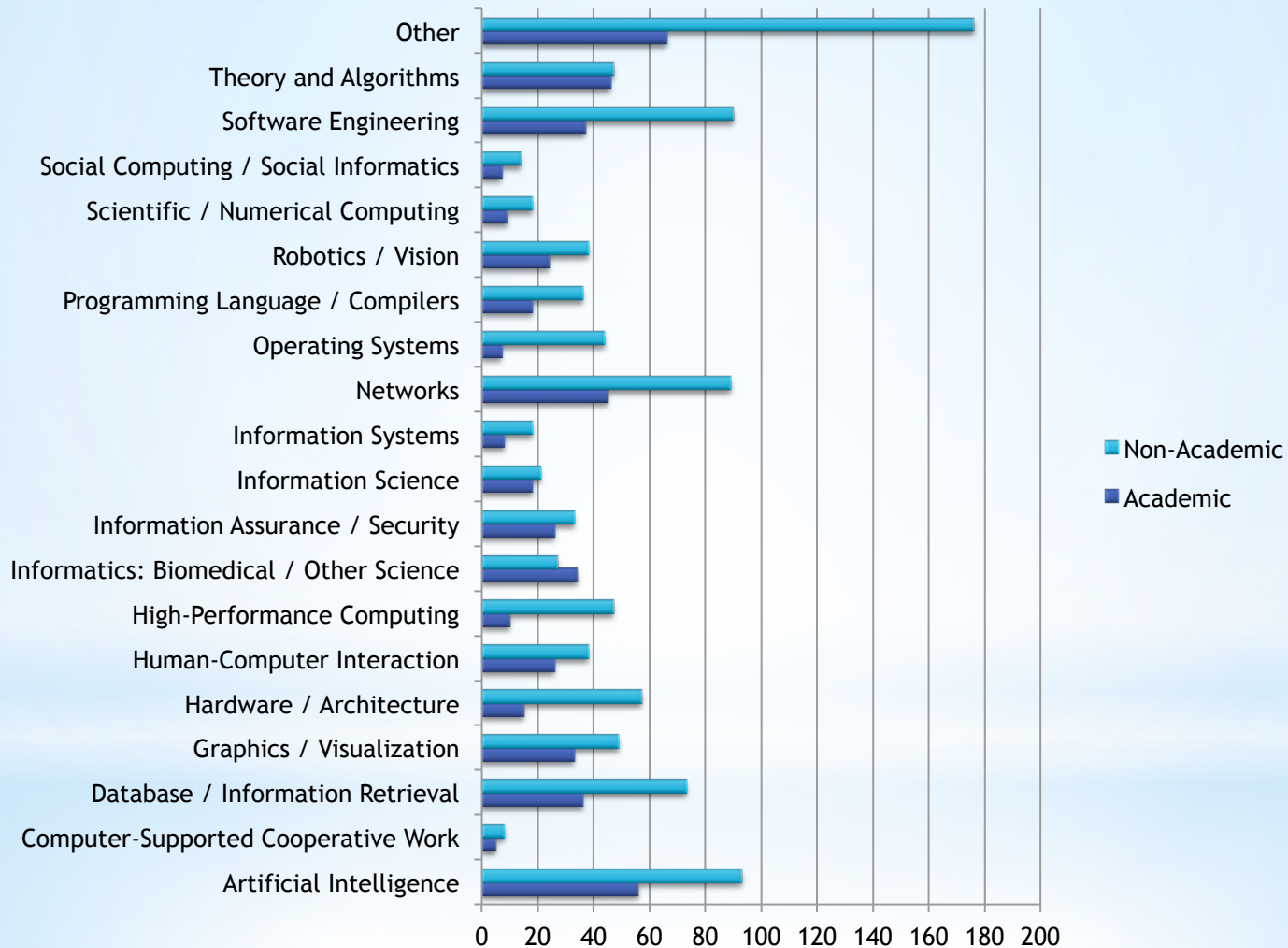
The Changing Complexion of Computing

Employment of New Ph.D.s in Tenure-Track Faculty, Industry, and Postdoc Positions

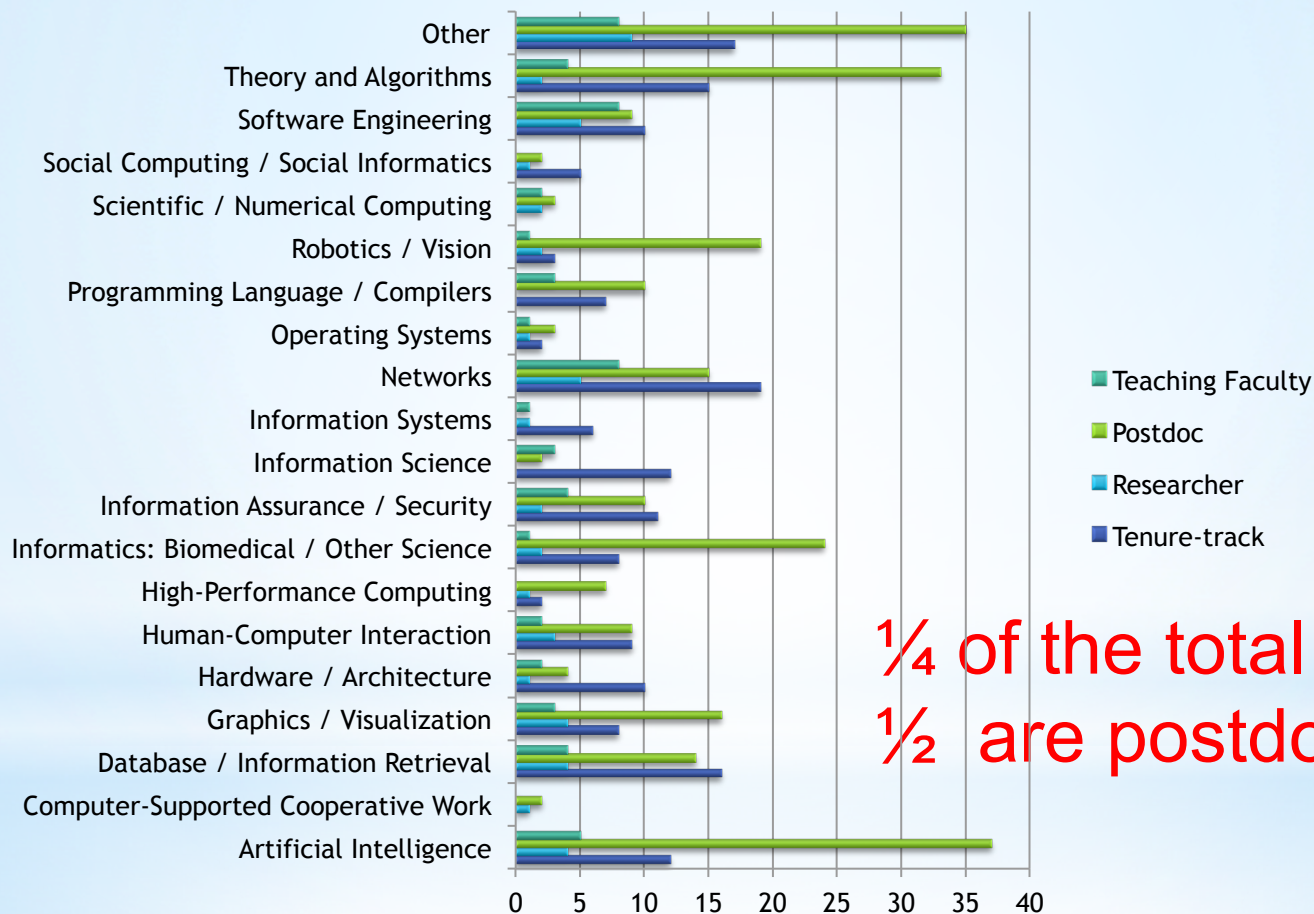
Source: CRA Taulbee Survey



2012-2013 Employment Data by Sector

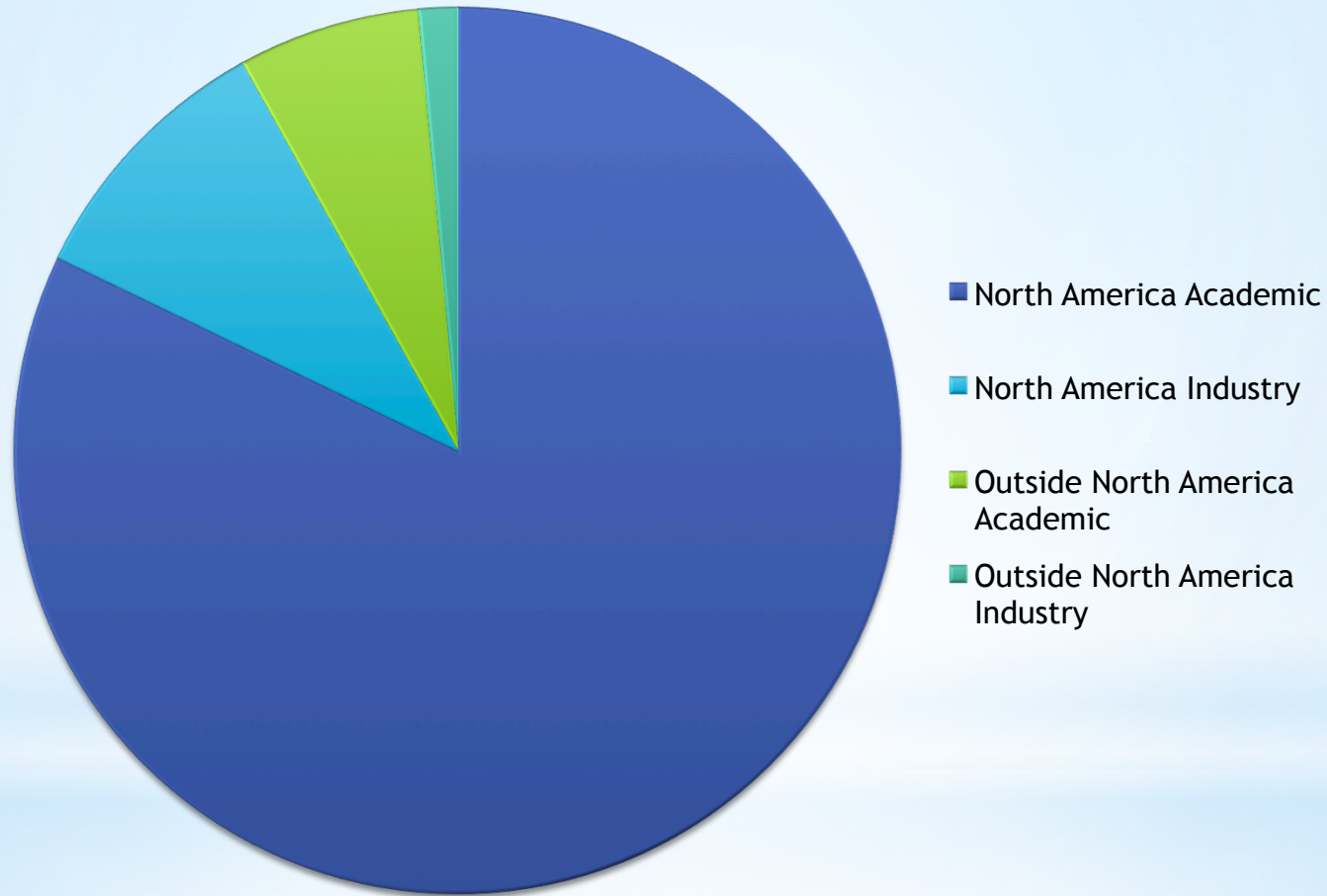


2012-2013 Employment within Academia for PhD Graduates by Sector



$\frac{1}{4}$ of the total are TT
 $\frac{1}{2}$ are postdocs!

Postdoc Destinations of new Computing Ph.D.s in 2012-2013



Enabling: Computing Innovation Fellows Project -> Postdoc Best Practices

Request for Proposals | PostDoc Best Practices

9/30/13 11:49 PM

Computing Research Association
CRA

Request for Proposals

PostDoc Best Practices

Computing Research Association
CRA

Request for Proposals

PostDoc Best Practices

The Computing Innovation Fellows Project is a national effort to address the issues in the field resulting from the rapid growth of computing research. Currently we do not expect to offer positions in the field resulting from the rapid growth of computing research. However, we encourage prospective researchers to apply for positions suitable for new computing research.

[Postdoc Job Opportunities](#)

A courtesy website where employment positions suitable for new computing research.

The CIFellows Project was an activity of the Computing Research Association.

[2011 Class of Computing Innovation Fellows](#)

[PDF Version](#)

In recent years, new PhD's in the CS&E community have increasingly chosen postdoc training assignments in their pursuit of research careers. Large numbers of postdocs in CS&E are a new phenomenon for us. Our community has an opportunity, as a field, to institutionalize a set of best practices, drawn from our own experience and that of postdocs in other fields and to establish a culture that provides postdocs a superb enriching experience that launches their research careers.

© 2011 Computing Research Association
1828 L STREET, NW SUITE 800, WASHINGTON, DC 20036

by the National
A Guide for
ary Societies
ive collection
ublication.
se interested
r science and

[L.org/cra/](#)
understand
pursuing
CRA, CCC
fused a white
the preceding
s white paper
faculty,
s within their
ic website

Enabling: Postdoc Best Practices

- 3 Projects awarded
 - NYC - Columbia, Cornell, CUNY, NYU, Teacher's College
 - Virtual Engagement, City-wide
 - University of Washington
 - Postdoc Independence
 - Arizona State University, with University of Arizona and Northern Arizona University
 - Postdoc Community

CCC: Catalyzing and Enabling Computing Research

Ann Drobnis

Director

adrobnis@cra.org