Computing Community Consortium

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Director

Northwestern University
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What is the CCC?

- Established in 2006 through a multi-year cooperative agreement between the National Science Foundation and CRA
- A standing committee of CRA
- Provides a voice for the national computing research community
- Facilitates the development of a bold, multi-themed vision for computing research - and communicates this vision to stakeholders
A broad-based Council

Leadership:
- Ed Lazowska, U of Washington (Chair)
- Susan Graham, UC-Berkeley (Vice-Chair)
- Erwin Gianchandani, CRA (Director)

Terms ending 2014:
- Deborah Crawford, Drexel
- Gregory Hager, Johns Hopkins
- John Mitchell, Stanford
- Bob Sproull (ret.)
- Josep Torrellas, UIUC

Terms ending 2013:
- Randy Bryant, CMU
- Lance Fortnow, Northwestern
- Eric Horvitz, Microsoft Research
- Hank Korth, Lehigh
- Beth Mynatt, Georgia Tech
- Fred Schneider, Cornell
- Margo Seltzer, Harvard

Terms ending 2012:
- Stephanie Forrest, U of New Mexico
- Chris Johnson, U of Utah
- Anita Jones, U of Virginia
- Frans Kaashoek, MIT
- Ran Libeskind-Hadas, Harvey Mudd
- Robin Murphy, Texas A&M

Rotated off:
- Bill Feiereisen, Intel (2011)
- Dave Kaeli, Northeastern (2011)
- Dick Karp, UC-Berkeley (2010)
- John King, U of Michigan (2011)
- Peter Lee, Microsoft Research (2009)
- Karen Sutherland, Augsburg U (2009)
- Dave Waltz, Columbia (2010)

Meets three times a year, including an annual summer meeting in Washington, DC
A multitude of activities

- Community-initiated visioning:
  - Workshops that bring researchers together to discuss “out-of-the-box” ideas
  - Challenges & Visions tracks at conferences

- Outreach to the White House, Federal funding agencies:
  - Outputs of visioning activities
  - Short reports to inform policy makers
  - Task Forces -- Health IT, Sustainability IT, and Data Analytics

- 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
4 meetings during summer 2008
Roadmap published May 2009
Extensive discussions between visioning leaders & agencies

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

National Robotics Initiative is announced

Henrik Christensen
Georgia Tech

http://cra.org/ccc
One-third of the PCAST NITRD Working Group members were CCC Council members.

The report drew extensively from CCC white papers.

An excellent roadmap for the field.

The challenge moving forward: translating it into action.
Current areas of emphasis

- Data analytics
  - Series of white papers written for policy makers in summer 2010
  - Ongoing discussions with OSTP and Federal agencies

- Health information technology
  - Workshop held in San Francisco in October 2009
  - NSF/CISE initiative on Smart Health & Wellbeing (SHB) announced in FY 2011

- Education (Learning) Technologies
  - Roadmap produced in summer 2010
  - President’s FY 12 budget would establish “ARPA-ED”

- Role of Information Sciences & Engineering in Sustainability
  - Workshop in Washington, DC, on Feb. 3-4, 2011
  - Ongoing discussions with NSF/CISE and DoE Office of Energy Efficiency & Renewable Energy
- Propose visioning activities, white papers, Challenges & Visions tracks at research conferences
- Put together short videos for undergraduates
- Contribute to the CCC Blog
- Send us a research highlight for the Highlight of the Week

Get involved today: erwin@cra.org or 202-266-2936
http://cra.org/ccc or http://cccblog.org/
Mission and activities

- Strengthen research and education in the computing fields
  - Working to influence policy that impacts computing research
  - Encouraging the development of human resources
  - Contributing to the cohesiveness of the professional community

- Collect and disseminate information about the importance and state of computing research

Table 1. PhD Production by Type of Department and Rank

<table>
<thead>
<tr>
<th>Department, Rank</th>
<th>PhDs Next Year</th>
<th>Avg. per Dept.</th>
<th>PhDs</th>
<th>Avg. per Dept.</th>
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</thead>
<tbody>
<tr>
<td>US CS Total</td>
<td>1,501</td>
<td>10.0</td>
<td>1,696</td>
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<tr>
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<td>17.1</td>
<td>966</td>
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