PCAST Finds IT R&D Critical to U.S. Competitiveness, Calls for Renewed Federal Investment

Backed by strong support from the White House, the President's Council of Advisors on Science and Technology (PCAST) last month released a biennial report about the nation’s 14-agency, $43.3 billion Networking and Information Technology Research and Development (NITRD) program – emphasizing the critical role of advances in networking and information technology (NIT) to U.S. economic competitiveness, and calling upon the nation to “continue to innovate more rapidly and creatively than other countries in important areas of NIT” in order to sustain and improve quality of life.

The nation’s CTO and CIO joined other leading White House officials, cochairs of PCAST’s NITRD review working group, and external discussants at the December 16 public release of the “Designing a Digital Future” report in Washington. Among the participants, Office of Science and Technology Policy Deputy Director for Policy Tom Kalil summarized why NIT R&D is so important to the administration:

- The information revolution is far from over, with a number of core challenges in computer science yet to be addressed;
- NIT can accelerate the pace of discovery in virtually every scientific domain;
- NIT is having a huge impact upon the nation’s economy, contributing to over two-thirds of the increase in productivity since 1995; and
- There exists a direct relationship between NIT and our nation’s grand challenges, such as healthcare, education, energy, open government, etc.

Kalil’s comments were consistent with PCAST’s key findings: “Advances in NIT are crucial to achieving our major national and global priorities... NIT will be an indispensable element in buildings that manage their own energy usage; attention-grasping, personalized methods that reinforce classroom education and learning; continuous unobtrusive assistance for people with physical and mental disabilities; and strong resilience in cybersecurity... NIT advances accelerate the pace of discovery in nearly all other fields.”

And they came just days after then-National Economic Council Director Larry Summers delivered impassioned remarks about the significance of IT to the nation’s economy (see http://tinyurl.com/ccecblog-health-

If you look at the economic history of the last 150 years, it’s a lot about the steam engine, it’s a lot about electricity, it’s a lot about things that came from the automobile – all of which gave people capacities to do things they hadn’t done before and touched almost every aspect of life. And this generation’s technology is information technology with all that it makes possible, and we need to make sure that it is exploited as widely and as pervasively as possible. And what better time to accelerate investment in information technology than at a time of substantially unemployed resources that can be put to work providing jobs that are important in the short term and providing capabilities that are profoundly important in the long run.”

PCAST’s Key Recommendations

PCAST makes three key recommendations in the report, beginning with a call for new multi-agency NIT R&D initiatives that support high-risk/high-reward research in areas of particular importance to national priorities:

- Health information technologies: make possible comprehensive lifelong multi-source health records for individuals; enable both professionals and the public to obtain and act on health knowledge from diverse and varied sources; and provide appropriate information, tools, and assistive technologies that empower individuals to take charge of their own health and healthcare to reduce cost. Importantly, PCAST recommends we “[g]o well beyond the current national program to adopt electronic health records.”

- Energy and transportation: dynamic power management broadly; interoperable standards for real-time control; low-power systems and devices; and improved surface and air transportation.

PCAST Finds IT R&D Critical - Continued on Page 4

Computing Community Consortium

In the three years since the inception of the Computing Community Consortium—an experiment by the National Science Foundation and the Computing Research Association to create an entity that mobilizes the community to debate longer-range research challenges and build consensus around specific research visions—researchers in many different areas of our field have stepped to the forefront to lead activities that have defined key questions shaping our intellectual future. Yet undoubtedly there are many areas and ideas still unexplored and, as we begin a new year, we encourage you and your colleagues to pursue your boldest, most innovative concepts with us today!

CCC-funded visioning activities have covered a wide range of computing research areas, including cyber-physical systems, health information technologies, big data, theory, free and open source software, computer architecture, and interactive technologies (a full list appears at http://cra.org/ccc/activities.php). In addition, individual (and, in some cases, small team) have authored White Papers on topics spanning transportation, energy and sustainability, “P4 medicine,” and data analytics (see http://cra.org/ccc/initiatives.php). And as reported in this space last November, the results of these activities are now informing our nation’s leaders on new directions and paths for Federal R&D funding.

For example, thanks in large part to the terrific efforts of Dr. Henrik Christensen at the Georgia Institute of Technology, Matt Mason at Carnegie Mellon University, and Vijay Kumar at the University of Pennsylvania, and several others, the CCC-led Robotics Roadmap project has resulted in numerous new funding programs, such as RTD2: Research for Robotics which was announced by the White House last fall (for details, see http://www.whitehouse.gov/blog/2010/09/15/rt2-research-robotics). Similarly, Beverly Woolf of the University of Massachusetts at Amherst has been working closely with Federal officials to explore possible initiatives in education technology, largely stemming from (the CCC’s Ed Tech Roadmap (http://cra.org/ccc/edtech.php). Later this spring, CCC leadership will begin to pursue action on a series of White Papers describing the role of data mining, machine learning, predictive modeling, and others, in the content of national priorities such as healthcare, energy, and transportation.

Although the CCC is pushing ahead on a number of new visioning topics (stay tuned for more details in the coming issues of the CRN—and you can also keep up to date through our blog at http://ccebog.org), we welcome your involvement today.

Do you have audacious and inspiring research challenges for the field? Can you provide leadership and efforts to move us forward and state them in compelling ways? And, guided by the CCC, would you be willing to devote time and energy to do the extensive work required to connect the resultant visions to initiatives at NSF and at mission agencies? If so, please consider submitting short visioning proposals to the CCC (for instructions, see http://cra.org/ccc/visions.php). Our goal is to help provide leadership to facilitate exciting visions put forward by the computing research community. To do that ably, we need your constant involvement.

Dr. Erwin Gianchandani (erwin@erwinconsulting.com), 202-166-2936 is the Director of the Computing Community Consortium (CCC) and the Computing Innovation Fellows Project. Dr. Ed Lazowska is Chair of the CCC Council and Bill & Melinda Gates Chair in Computer Science & Engineering at the University of Washington. Dr. Susan Graham is Vice-Chair of the CCC Council and Peking Chen Distinguished Professor of Electrical Engineering and Computer Science Emerita at the University of California/Berkeley.

Pursuing Your Visions for the Future

By Erwin P. Gianchandani, Ed Lazowska, and Susan L. Graham
Expanding the Pipeline

Mentoring Across the Pipeline: CRA-W Programs at the Grace Hopper Celebration of Women in Computing

By Joann J. Ordille

The Computing Research Association Committee on the Status of Women in Computing (CRA-W) continues its central role in the Grace Hopper Celebration of Computing last year. CRA-W provided mentoring across the pipeline in a series of workshops targeted at undergraduates, graduate students, and early career researchers. In conjunction with AT&T, CRA-W sponsored a luncheon for researchers in industrial and government laboratories.

CRA-W’s role goes far beyond these programs. Past CRA-W Co-Chair Lori Pollock was the Program Co-Chair of the Conference and CRA-W Board Member Tracy Camp was the General Chair. Members of the CRA-W Board participated across the spectrum of conference committees with CRA-W filling focal roles on both the academic and industrial advisory committees for the conference. This full participation stems from CRA-W’s role as a founding sponsor of the conference, and its history of having participated in every Grace Hopper Conference in a significant way.

On September 28, 2010, the Grace Hopper Conference opened again to a sold-out attendance of 2,475, a 37 percent increase over last year’s sold-out participation. This year participants arrived from 29 countries and included members of industry, government and academia as well as many students. One could overhear lively discussion about the topics of change and cross-disciplinary collaboration raised by Keynote Speaker Carol Bartz, CEO of Yahoo! and Doy-Loon Le, Senior Fellow at Texas Instruments. The full program included presentations from other executives as well and from experts in industry, government, and academia. Some of the experts were students presenting their work for the first time and change agents who had made significant positive social impacts with their work in computing.

CRA-W’s career mentoring workshops for undergraduates sought to answer the questions:

• What does it take to do great research?
• How do I become a researcher?
• How do I enjoy and succeed in graduate school?
• How do I start my own research program?
• How do I get promoted?

In the “Is research for me?” session, Professor Susan Roger of Duke led a lively interaction facilitated also by Professor Ellen Walker of Hiram University, PhD candidate Abhishek Chakravorty of Duke, and PhD candidate Susanna Ricco of Duke. Students gained direct experience of thinking through a research problem, and discussing it with others building and community-building sessions. Participants gain new skills and new contacts to help them succeed in graduate school and their subsequent careers.

The early career workshop addressed the questions:

• How do I start my own research program?
• How do I become a leader in my field?
• How do I get promoted?

Professor Andrea Daniluk of Williams and Professor Lise Gostev of the University of Maryland, and Dr. Ashley Stroupe of the Jet Propulsion Lab helped participants learn to create a research program whether they worked at a teaching college, a research university or a government/industrial laboratory.

Dr. Deb Agarwal of Lawrence Berkeley National Lab, Professor Carla Gomes of Cornell, and Dr. Irene Greif of IBM’s Center for Social Software then bemoaned the odd mix of variables and opportunities that led to establishing their leadership in the field. One highlight was Dr. Greif’s discussion of the creation of the computer-supported cooperative work research area.

In the final session, Dr. Laura Haas, IBM Fellow and Director of Computer Science at IBM Almaden, and Professor Ellen Zegura, Chair of the School of Computer Science in the College of Computing at Georgia Tech, outlined the qualities and activities that lead to being promoted in academia or industrial research.

These three sessions provide a subset of the multi-day program in the CRA-W’s Career Mentoring Workshops (www.cra-w.org/mentorWorkshop). There are three variations of these workshops— for research faculty, for faculty in graduate education, and for researchers in government and industrial labs. In addition to these programs, CRA-W and AT&T sponsored a luncheon for researchers and others interested in industry and government labs. This meeting sparked the ideas of having a half-day session for labs researchers at the next Grace Hopper Conference. Look for details of that in future months.

This year’s programs were coordinated by Dr. Joann Ordille of NASA Ames Research Center. This year’s programs at the Grace Hopper Conference will be coordinated by Dr. A. J. Brush of Microsoft Research.

Dr. Joann J. Ordille is a Consulting Mentor, Technical Staff at NASA Ames Research Center.
CRA Announces Outstanding Undergraduate Researcher Award Winners

The Computing Research Association honors the recipients of its 2011 Outstanding Undergraduate Researcher Awards, sponsored this year by Microsoft Research. Mitsubishi Electric Research Labs (MERL) and Microsoft sponsor the awards in alternate years.

Winner, Female Award

Hijing (Valentina) Shin is a Senior at Princeton University majoring in Computer Science. Over the years, there have been a number of research projects seeking to use Computer Science techniques to help resolve archeological artifacts such as broken wall paintings. However, these projects have typically used brute force approach to dating pieces and have been only somewhat successful. Valentina pioneered a completely different approach based on detailed analysis of the way frescoes break. She created an algorithmic model to make this possible, using a semi-automated study of frescoes that have been reconstructed by hand. This model of the breaking process shows great promise for improving the automatic matching of pieces. The model also opens the door on other possibilities such as understanding what kinds of events caused the destruction of a particular wall. In addition to quality research, Valentina is a star student, ranked as one of the best in the entire university. She also tutors in Princeton’s Engineering Education for Kids program.

Winner, Male Award

Patrick Wendell is a Senior at Princeton University majoring in Computer Science. A key problem in deploying Internetscale systems is directing client requests to the best (faster/most responsible) instance of a web site. Patrick designed, built, and deployed a system called DONAR that overcomes the limitations of the current state-of-the-art of replica selection and has both conceptual and practical contributions. The work realizes optimal replica selection through a robust distributed algorithm that is both stable and effective. He demonstrated this through formal proofs, extensive simulations, and real deployment. Today, DONAR runs on a network if global servers and provides replica selection for CoreCDN, a large content distribution network and MeasurementLab, a distributed research platform. This past summer, Patrick worked at Cloudera. There, he quickly became one of the trusted committers to Apache’s Hadoop, the HPC network layer to be used in Hadoop, a distributed computing framework. Patrick’s work on Avro is designed to improve the performance, maintenance, and debugging of large distributed systems.

Runner Up, Male Award

Mark D. Leinerson is a Senior at Tufts University majoring in Computer Science. New high-throughput genetic experiments have resulted in massive graphs that can be mined for data about groups of genes that work together. One of the most useful applications is to look for in these graphs are small tightly connected subgraphs that have large negative maximum cuts. Mark (Max) was the lead student researcher on a project to automatically locate such subgraphs. He implemented the entire algorithm and devised a clean and elegant technique for pruning the results. In this work he has shown both computational and biological sophistication. Since the summer after his freshman year at Tufts, Max has worked on algorithmic problems in Computational Molecular Biology. His first project resulted in his co-authoring a publication in RECOMB 2009; currently he is the first author on a paper submitted to RECOMB 2011.

Finalists, Female Award

Jacqueline Addesa, Virginia Tech; Eleanor Amsin, Yale University; Laura Bartha, Queen’s University; Erin McMahan, Vanderbilt University; Robin Miller, University of Rochester; and KatieAnna Wolf, University of Minnesota.

Finalists, Male Award

Jory Denny, Texas A&M University; Francis Ferraro, University of Rochester; Harry Gao, College of William and Mary; Stephen Miller, UC Berkeley; Todor Mollov, UC San Diego; and Adrian Vladu, Brown University;

Honorable Mentions, Female Award

Dania Albuere, University of Louisville at Lafayette; Sarah Cannon, Tufts University; Ian Hu-Ehr, Cornell University; Sarah Ferraro, Harvey Mudd College; Heather Friedberg, University of Pittsburgh; John Gilpin, UC San Diego; Joy Kim, University of Washington; Melissa Kudelki, University of Illinois at Urbana-Champaign; Kay Ousterhout, Princeton; and Daniela Retelny, Cornell University.

Honorable Mentions, Male Award

Jacob Bank, Cornell University; Shrutheshi B, Lafayette College; John Bohlmann, Purdue University; Trevor Brown, York University; Desai Chen, Carnegie Mellon University; Christopher Cunningham, University of Virginia; Jeffrey Deuel, Texas A&M University; Aditi Deshpande, University of Arkansas; Daniel Fielder, Harvey Mudd College; Nicholas FitzGerald, University of British Columbia; Ronald Garduno, University of New Mexico; Andrew Gocke, Northwestern University; Daniel Hefner, University of Louisiana at Lafayette; Cipta Herawati, Columbia University; Senior at Rice University; Forrest Landau, University of Illinois at Urbana-Champaign; Christopher Johnson, Knox College; Antony Kaplan, New York University; Sean Kelley, Tufts University; Samuel Kerr, Purdue University; Tsvetan Kozhanov, University of Nevada; Renei Kevin Lewis, Carnegie Mellon University; Jake Luzader, University of Notre Dame; Eric McManus, University of Massachusetts; Lowell; Aleksandr Morgan, University of Virginia; Thomas Morgan, Massachusetts Institute of Technology; Fred Montastier, Arizona State University; Casey J. O’Brien, Marquette University; Jairo Pava, Florida International University; Patrick Plonski, University of Minnesota; Brandon Plost, University of Texas at Austin; Jeffrey Radley, University of Washington; Vinicio Raymundo, Loyola University Chicago; Christian Anjou Rosenfeld, Drexel University; Abhishek Sarkar, University of North Carolina at Chapel Hill; R. Collins Schaeffer, University of Washington; Ben Shirley, University of Western Ontario; Christopher Steinmuller, Louisiana State University; Nickole Stiurca, University of Texas at Austin; Peter Terlep, DePaul University; Kyle Thunow, Marquette University; Stephen Tu, UC Berkeley; Michael Ty, Princeton University; Joseph Wontoba, DePaul University; Samuel White, University of Rochester; Linfeng Yang, Harvard University; Anak Yordanov, Harvey Mudd College; and Jiaqi Zhu, Cornell University.

This year’s selection committee included Richard Waters (Mitsubishi Electric Research Labs), Chair; Ed Fox (Virginia Tech); Gary Leavens (University of Central Florida); Anna Lubis (University of Waterloo); and Chris Stone (Harvey Mudd College).

The Outstanding Undergraduate Researcher Award competition is announced each year in mid-August; nominations are due in mid-October; and the results are announced December 1. For details, see http://www.cra.org/awards/undergrad/
To bring a fresh perspective, the founders of the Richard Tapia Celebration of Diversity Conference chose a General Chair for the 10th year anniversary who had never attended the conference before. When the Tapia himself called, it was such an interesting opportunity that I couldn’t decline. After highlighting the program to be held April 3-5 in San Francisco, I’ll explain the process that led to it.

Our top goal was to find luminaries and rising stars who are also great speakers. Based on feedback (see below), we’ve increased the number of plenary speakers:

- Blaise Aguerre y Arancio of Microsoft, who Technology Review selected as a 2008 Young Innovator for putting together a program titled “Dynamic and Augmental Reality for Maps.”
- Deborah Estrin, the Jon Postel Professor of Computer Science at UCLA and a member of the National Academy of Engineering, will talk on “Participatory Sensing: From Ecosystems to Human Systems.”
- Alan Eustace, Senior Vice President of Engineering and Research at Google, will give an after-dinner talk entitled “Organizing the World’s Information.”
- Ilia Hidkova, Associate Professor in the Computational and Applied Mathematics Department at Rice University and recipient of the 2005 Optimization Prize for Young Researchers, will talk on “Discrete Optimization Techniques for Networks.”
- Anjana Howard, Associate Professor in the ECE School at Georgia Tech who Technology Review selected as a 2003 Young Innovator, will give the talk “SnowMotes: Robotic Scientific Explorers for Understanding Climate Change.”
- John Kubiatowicz, CS Professor at UC Berkeley who U.S. News and World Report named as a Person to Watch in 2004, will give the talk “Rethinking Operating Systems for Managing Computing.”
- Patty Lopes of Intel, a winner of Hewlett Packard’s Technical Leadership Award in 2001 and a leader of Linux in Computing, will talk on “Testing to Ensure that Moore’s Law Continues.”
- Irving Wladawsky-Berger, former chair of the IBM Academy of Engineering and the 2001 IEEE Hispanic Engineer of the Year, will give the Ken Kennedy Memorial Lecture on “The Changing Nature of Research and Innovation in the 21st Century.”

The rest of the program (http://tapiaconference.org/2011/prog_schedule.html):

- Keeps popular sessions from 2009 (doctoral consortium, resume workshop, grad school workshop, career development workshop, poster session, town hall, banquet, and dance).
- Adds a few fresh ones as experiments for 2011 (lunch with successful local people, opportunity poster session and meetup, see the city, and offers five “Birds of a Feather” or panel sessions proposed and run by attendees.

Reshaping Tapia
How should we evaluate which ideas best match Tapia 2011? We decided to focus first on its mission, and write it down. As it would shape the program, there was a lot of discussion and even disagreements between founders of the conference.

The result:
“The goal of the Tapia Conferences is to bring together underrepresented and graduate students, professionals, and faculty in CS&E from all backgrounds and ethnicities to: Celebrate the diversity that currently exists in CS&E; Connect with others with common backgrounds, ethnicities, and gender so as to create communities that extend beyond the conference; Receive advice from and make useful contacts with CS&E leaders in academia and industry; and Be inspired by great presentations and conversations focused on people of color in CS&E who have similar backgrounds, ethnicities, and gender to the attendees.”

Next we decided to ask students what they liked in addition to asking past organizers, much like getting feedback from students as well as past instructors when teaching a new course. We polled Tapia 2009 attendees in May 2010 to find which sessions they attended and enjoyed and to solicit new ideas. From the 141 respondents (35% of Tapia 2009), we saw strong support for the student poster session, the doctoral consortium, the town hall meeting, the banquet, and many invited speakers. We also learned that many talks based on submitted papers were unpopular, the many parallel events were poorly attended, the conference needed more visibility, and the conference was probably one-half day too long.

We brainstormed about the feedback and came up with a tentative plan and several new ideas that we tested with a follow-up survey in June. Although a few proved unpopular, the 2009 attendees liked the following:

- Given that more than two-thirds of attendees are students, make sure most events are attractive to students.
- Have more single-track sessions so that attendees have more opportunities to share the same experiences.
- Take advantage of being in San Francisco to have one special long lunch with successful Silicon Valley people.
- Try leaving the hotel to see local sites in the city, and find and encourage attendance at other sessions.
- Add some panels or Birds of a Feather sessions based on proposals by attendees so that more people can participate in shaping the program.

There was also one thought-provoking comment in the first survey that influenced our thinking: Cointelpro suggested that we do something REAL together. Interviewees tell us that people need good reasons to have enduring relationships, so creativity in hooking people up is needed.

In response, we are trying to link students with professionals and professors who have research opportunities. Hence, in addition to students who show off what they have done, we added an Opportunity Poster Session for students to learn what they might want to do next. First, some developmental professors and professors will try to recruit students to work remotely on research projects. With emails, Twitter, Skype, and so on, many projects are already geographically distributed. Most open source projects involve people who have never met! In addition to research projects, the Opportunity Poster Session will also include universities recruiting for graduate school and companies hoping to hire. A “meetup” session on the final afternoon, including both the student and the opportunity posters, acts as a networking opportunity and a chance to solidify enduring relationships.

Given the importance of feedback on Tapia 2011, we’ll survey during and after the conference to see what worked.

We hope to see you and your students April 3-5 in beautiful San Francisco for what we believe will be a stimulating and memorable event.

David Patterson is the Pande Professor of Computer Science at the University of California at Berkeley and General Chair of the 10th Anniversary Tapia Conference 2011 in San Francisco.
Mid-Term Elections Throw Federal Science Funding in Doubt

Science Agencies May See Flat Funding or Worse in Coming Year, Beyond

By Peter Harsha

With a change in the balance of power in Congress after the November congressional elections, including a shift in the leadership of the House of Representatives, prospects for any significant increase in funding for federal science programs have dimmed considerably, though perhaps not yet completely extinguished. As this goes to press in early December, funding increases for key science agencies approved by congressional appropriators for the 2011 fiscal year appear in jeopardy, as Democrats in the lame-duck Congress weigh whether to attempt to push through an omnibus spending bill before the end of the session or punt the uncompleted spending measures to the new Congress in January.

It appears likely that the leadership will elect to pass a stopgap spending measure known as a Continuing Resolution (CR) for fiscal year 2011 (which began October 1, 2010) that will continue to fund the operations of government at fiscal year 2010 levels. What is not yet known as this is written is the length of that CR. Fiscally conservative members of both parties are lobbying the leadership to consider passage of a CR that would extend until the start of FY 2012 in October 2011, effectively giving up the FY 2011 appropriations cycle.

As such, what “before the November elections, the House and Senate were pushing through an omnibus spending bill before the end of the session or punt the uncompleted spending measures to the new Congress in January.”

However, in this “best case” for the U.S. science community, deal-making with GOP lawmakers still on the fence could mitigate any gains in funding. To entice the support of these undecided lawmakers, the leadership could offer to include such things as a ban on earmarks within the bill, or perhaps an across-the-board cut to spending in the bill that would reduce or eliminate many of the increases previously approved by appropriators.

A third option is that Congress might elect to pass a CR at “opposite” levels in February, giving the new session of Congress some time to decide whether to pass an omnibus for FY 2011 or just extend the CR for the duration of the year. There remains a significant amount of uncertainty in the short-term, but one thing that is certain-post-election is that lawmakers feel considerable pressure to cut discretionary spending and work to reduce the federal deficit. House Republicans are rallying behind a plan that would cut back discretionary spending to FY 2008 levels. Such a move would have a devastating effect on federal science agency budgets. If the cuts were applied to the NSF budget, the agency would lose $620 million in current annual funding; DOE’s Office of Science would lose more than $1 billion in current funding; and NIST’s core research accounts would lose $108 million. However, it is not clear that science budgets would receive the full brunt of the GOP’s planned cuts. There is a growing sentiment in the House and Senate, and amplified by a recent report by a Presidential commission looking for deficit reduction solutions, that investments in research and education are critically important to U.S. economic growth and ought to be protected in any deficit reduction plan. The two chairs of the President’s National Committee on Fiscal Responsibility and Reform—former Republican Senator Alan Simpson (WY) and former Clinton Chief of Staff Erskine Bowles—recommended more than $200 billion in cuts to government programs through 2015, but also recommended continued investment “in education, infrastructure and high-value R&D.”

While that support is encouraging for advocates of increased science funding, congressional retirements and election results have significantly diminished the number of “congressional champions” for research funding in the Congress. With the retirements of current House Science and Technology Committee chair Bart Gordon (D-TN), Rep. Vern Ehlers (R-MI), and appropriations chairman David Obey (D-WI), along with the election losses of Commerce, Justice, Science Appropriations Subcommittee Chair Alan Mollohan (D-WV), Research and Education Subcommittee ranking member Bob Ingliss (R-IN), and Energy and Environment Subcommittee Chair Brian Baird (D-WA), the science community has lost six powerful voices of support for its issues in Congress—six members who have helped defend the research investment during the appropriations process and helped defend the science community whenever it faced challenges in either chamber. A key priority for science advocates in the new Congress is identifying and nurturing the next generation of congressional champions for science.

The longterm challenge for Congress is to address the unsustainable current growth of both mandatory spending, like federal payments for Social Security and health care, and discretionary spending. In this environment, all discretionary spending, including investments in research, will be under heightened scrutiny. Science community advocates will need champions in the Congress to help make the case for continued investment in the months and years ahead.

Those champions will be needed not only for the appropriations battles ahead, but to push meaningful science policy. The America COMPETES Act, a bill that would reauthorize many federal science and education programs, also appears to have fallen victim to the changing political landscape in Washington. House and Senate leaders, having considered markedly different versions of the bill in each chamber last year, were unable to work out a compromise measure in time to make it on the lame-duck calendar. Instead, Congress pushed forward with more politically salient votes on extending expiring tax breaks and attempting to eliminate the Department of Defense’s “Don’t Ask, Don’t Tell” policy covering gay and lesbian servicemen and women. COMPETES will have to be reintroduced in the new Congress and, as a result, likely will contain much more modest authorizations for the NSF, DOE Science and NIST budgets, and support only for programs specifically designed to increase the participation of U.S. students in math and science disciplines.

The end of the 111th Congress in December and the beginning of the 112th Congress in January promises to be dynamic and full of challenges for the science advocacy community. For all the latest details about how the landscape is shaping up, as it happens, visit CRA’s Computing Research Policy Blog at: http://cra.org/blog.

---

Notes:
1 House and Senate appropriators approved increases of over $340 million to NSF’s research accounts and more than $26 million to NIST’s core research budget in FY 2011, but votes by the full House and Senate on the appropriation bill containing those increases were postponed until after the election.
2 In percentage terms, NSF would lose 8.4 percent of its proposed FY 2011 budget, DOE Science would lose 2.3 percent, and NIST would lose 15.2 percent.
Promoting a National Initiative for Technology-Mediated Social Participation

By Ben Shneiderman, Jennifer Preece and Peter Pirolli

Social media such as Facebook, Twitter, blogs, wikis, Flickr, and YouTube have garnered a billion users and their popularity is spreading rapidly, particularly on mobile devices. Technology-mediated social participation (TMSP) is a useful term for describing how these social media tools, user-generated content sites, discussion groups, problem reporting, and volunteer systems can be applied to national priorities. Provocative examples suggest transformative applications for healthcare/wellness, disaster response, energy sustainability, cost-effective education, and economic health. Additional new missions for these sociotechnical infrastructures include cultural heritage, political participation, environment/climate protection, public safety, international development, and local civic involvement.

While community activists and government staffers are dealing with many practical implementation aspects, these social media applications represent an exciting research topic for computer, information, and social sciences communities. For researchers, the TMSP workshops are just beginning to understand how improved designs can more effectively support: 1) trust among collaborators so they can rapidly resolve their differences and act effectively when needed; 2) decision-making by responsible leaders (integrating authoritative guidance from respected parties, while building a searchable archive of case studies for future consultation); and 3) entrepreneurial and community projects that depend on reaching relevant local markets and niche audiences.

Recently, the National Science Foundation funded a pair of workshops to explore these very issues about TMSP. The workshops were held in Palo Alto, CA, in December 2009 and Arlington, VA, in April 2010 (http://www.tmsp.umd.edu). More than 60 leading faculty and graduate students from a variety of disciplines, along with representatives of key corporations, government agencies, and nongovernment organizations, participated. A key goal of this activity was to encompass civic efforts that will benefit local, national, and international communities.

The breakout groups developed six papers covering scientific foundations, infrastructure for research, design issues, health/wellness, open government, and educational reforms. These papers—along with an introduction summarizing the effort and key conclusions—comprise a special November 2010 issue of IEEE Computer. Among the highlights:

• The report on “Social media technology and government transparency” indicated how much progress has already been made in data access, but how much more is needed to achieve successful collaborative and participation.

• The report on “Social participation in Health 2.0” gave an account of possibilities for healthcare/wellness projects spanning personal health, public health, and clinical health research.

• The innovative ideas for setting educational priorities spanned K-12, Middle School, High School, Undergraduate and Graduate education, and then described lifelong learning and cooperative education services for business.

A common theme across the articles was to apply social participation strategies to the research efforts by establishing collaboratories to coordinate research, sharing data and results, enabling active communities of practice, and promoting public awareness.

The workshops participants also agreed that, as national initiatives are launched in several countries to dramatically increase research and education on social media, a coordinated approach across the computing, information, and social sciences communities will be helpful. Clearly stated research challenges should have three key elements:

1) Close linkage to compelling national priorities. A rapidly growing range of websites enables researchers to report emergency situations involving storms, fires, earthquakes, highway accidents, and crimes to local, national and international authorities as well as traditional media outlets. For example, recent efforts in the aftermath of Haiti’s earthquake have inspired new strategies for coordination among government, national, and international authorities. For example, recent efforts in the aftermath of Haiti’s earthquake have inspired new strategies for coordination among medical and other organizations.

2) Deep science questions based on research issues that are compelling, but not necessarily immediately actionable. As an example, the researchers investigated the use of social media to support disaster relief. The national science community has agreed that, as national initiatives are launched, social media applications will have profound societal impacts in the coming decades. For more information, please review the November 2010 issue of IEEE Computer or see a recent presentation about TMSP, including discussion with Sonal Shah (White House Director of Innovation and Civic Participation) at the Google (http://www.newamerica.net/events/2010/technology-social_innovation/).

Ben Shneiderman (ben@umd.edu) is Professor of Computer Science and Founding Director of the Human-Computer Interaction Lab at the University of Maryland-College Park. Jennifer Preece (jpreec@umd.edu) is Professor and Dean of the University of Maryland’s College of Information Studies, and Peter Pirolli (pier@parc.com) is a Principal Scientist at PARC.

CRA-W Anita Borg Early Career Award

Nomination Deadline: February 15, 2011

Details: http://www.cra-w.org/borg
Spearhead Cutting-Edge Technology and Design for a Better World

The Singapore University of Technology and Design (SUTD), established in collaboration with the Massachusetts Institute of Technology (MIT), is seeking a pillar head in the area of Information Systems Technology and Design for this new university slated to matriculate its first intake of students in April 2012.

SUTD, the first university in the world with a focus on design accomplished through an integrated multi-disciplinary curriculum, has a mission to advance knowledge and nurture technically grounded leaders and innovators to serve societal needs. SUTD is characterised by a breadth of intellectual perspectives (the “university”), a focus on engineering foundations (“technology”) and an emphasis on innovation and design, as an academic discipline, cuts across the curriculum and will be the framework for novel research and educational programmes.

MIT’s multi-faceted collaboration with SUTD includes the development of new courses and curricula, assistance with the early deployment of courses in Singapore, assistance with faculty and student recruiting, mentoring, and career development, and collaborating on major joint research projects, through a major new international design centre and student exchanges.

**FOUNDING HEAD OF PILLAR (Information Systems Technology and Design)**

For the Founding Head of Pillar, our search criterion is nothing short of the best and most reputable in the field. Shortlisted candidates must minimally have an excellent doctoral qualification and be an international award recipient for academic and research contributions to the relevant specialised field, with publications in renowned and reputable journals recognised by the international research community.

The final selection of the Head of Pillar will be based on:

- Your current senior academic position in a renowned prestigious university
- Your successful history in attracting funding for research
- Your proven track record in managing research projects
- Your ability to leveraged diverse teams and effectively manage people and resources
- Your passion to share SUTD’s vision on the “Big D” approach, focusing on the art and science of design within your specialisation
- Your appetite for entrepreneurship and risk taking
- Your ability to innovate and create an environment that promotes creativity and experimentation
- Your ability to inspire and motivate young minds to become leaders and inventors of tomorrow

We invite applications for the above position. Successful candidates can look forward to internationally competitive remuneration, and assistance for relocation to Singapore. If you share SUTD’s vision on multi-disciplinary curricula and research with a focus on Design in the broadest sense, please email your profile and references to Ms Jaclyn Lee at jaclynlee@sutd.edu.sg

To learn more about SUTD, please visit www.sutd.edu.sg
Brown University
Department of Computer Science
Faculty Position Available

The Department of Computer Science at Brown University invites applications for a tenured-track or tenured associate or full professor faculty position, with a preference for junior applicants, starting in Fall 2011. We will consider candidates in computer and software systems, broadly construed (including, but not limited to, operating systems, distributed systems, programming languages and security) and in artificial intelligence, broadly construed. Preference will be given to those candidates who best meet the teaching and research needs of the department. All applicants should have demonstrated a potential for excellence in research and teaching.

Junior applicants who are in their second or third academic year and tenured-track faculty members as well as several adjunct, research, and visiting faculty members in the computer science department have completed all requirements for the doctoral degree by September 1, 2011. The initial appointment as assistant professor is for three years and is renewable.

Applications for a junior position must submit a curriculum vitae and a description of research interests. Senior candidates should submit 5 names of references whom the committee may contact. These should be submitted online through the Computer Science Department’s website http://www.csd.brown.edu,Tenure-Track Faculty Position.

The faculty of the Division of Engineering and Applied Science and the Division of the Humanities and Social Sciences of the California Institute of Technology invites applications for a tenure-track position in computer science and software systems. We are seeking highly qualified candidates who are committed to a career in research and teaching.

Examples of research areas of interest include social networks, game theory, mechanism design, and matching, although the quality of the work is more important than the area. We have a particular interest in someone who has a good understanding of economics and game theory, but outstanding candidates from any background are welcome to apply. The initial appointment will be for normally four years, if renewed, and is contingent upon completion of the Ph.D. prior to August 1, 2011. The candidate should submit a letter of application and describe their current research, a vita, three letters of recommendation, and sample of work.

California Institute of Technology
Division of EAS and HSS
Tenure-Track Position

The Department of Mathematics and Computer Science at Carnegie Mellon University in Qatar invites applications for a tenure-track position in Computer Science to begin in Fall 2011. We are seeking candidates for this position who have a doctoral degree in Computer Science or a closely related field and a strong commitment to excellence in teaching, research, and service. Candidates with research interests in machine learning are particularly encouraged to apply. For application procedures and information on the school and department see http://www.cs.cmu.edu/faculty/carnegie_mellon_university.html. Review of applications will begin on January 10, 2011, and will continue until the position is filled.

Brown University
Department of Computer Science
Faculty Position Available

The Department of Computer Science at Brown University invites applications for a tenured-track or tenured associate or full professor faculty position, with a preference for junior applicants, starting in Fall 2011. We will consider candidates in computer and software systems, broadly construed (including, but not limited to, operating systems, distributed systems, programming languages and security) and in artificial intelligence, broadly construed. Preference will be given to those candidates who best meet the teaching and research needs of the department. All applicants should have demonstrated a potential for excellence in research and teaching.

Junior applicants who are in their second or third academic year and tenured-track faculty members as well as several adjunct, research, and visiting faculty members in the computer science department have completed all requirements for the doctoral degree by September 1, 2011. The initial appointment as assistant professor is for three years and is renewable.

Applications for a junior position must submit a curriculum vitae and a description of research interests. Senior candidates should submit 5 names of references whom the committee may contact. These should be submitted online through the Computer Science Department’s website http://www.csd.brown.edu,Tenure-Track Faculty Position.

The faculty of the Division of Engineering and Applied Science and the Division of the Humanities and Social Sciences of the California Institute of Technology invites applications for a tenure-track position in computer science and software systems. We are seeking highly qualified candidates who are committed to a career in research and teaching.

Examples of research areas of interest include social networks, game theory, mechanism design, and matching, although the quality of the work is more important than the area. We have a particular interest in someone who has a good understanding of economics and game theory, but outstanding candidates from any background are welcome to apply. The initial appointment will be for normally four years, if renewed, and is contingent upon completion of the Ph.D. prior to August 1, 2011. The candidate should submit a letter of application and describe their current research, a vita, three letters of recommendation, and sample of work.

California Institute of Technology
Division of EAS and HSS
Tenure-Track Position

The faculty of the Division of Engineering and Applied Science and the Division of the Humanities and Social Sciences of the California Institute of Technology invites applications for a tenure-track position in computer science and software systems. We are seeking highly qualified candidates who are committed to a career in research and teaching.

Examples of research areas of interest include social networks, game theory, mechanism design, and matching, although the quality of the work is more important than the area. We have a particular interest in someone who has a good understanding of economics and game theory, but outstanding candidates from any background are welcome to apply. The initial appointment will be for normally four years, if renewed, and is contingent upon completion of the Ph.D. prior to August 1, 2011. The candidate should submit a letter of application and describe their current research, a vita, three letters of recommendation, and sample of work.

California Institute of Technology
Division of EAS and HSS
Tenure-Track Position

The faculty of the Division of Engineering and Applied Science and the Division of the Humanities and Social Sciences of the California Institute of Technology invites applications for a tenure-track position in computer science and software systems. We are seeking highly qualified candidates who are committed to a career in research and teaching.

Examples of research areas of interest include social networks, game theory, mechanism design, and matching, although the quality of the work is more important than the area. We have a particular interest in someone who has a good understanding of economics and game theory, but outstanding candidates from any background are welcome to apply. The initial appointment will be for normally four years, if renewed, and is contingent upon completion of the Ph.D. prior to August 1, 2011. The candidate should submit a letter of application and describe their current research, a vita, three letters of recommendation, and sample of work.

California Institute of Technology
Division of EAS and HSS
Tenure-Track Position

The faculty of the Division of Engineering and Applied Science and the Division of the Humanities and Social Sciences of the California Institute of Technology invites applications for a tenure-track position in computer science and software systems. We are seeking highly qualified candidates who are committed to a career in research and teaching.

Examples of research areas of interest include social networks, game theory, mechanism design, and matching, although the quality of the work is more important than the area. We have a particular interest in someone who has a good understanding of economics and game theory, but outstanding candidates from any background are welcome to apply. The initial appointment will be for normally four years, if renewed, and is contingent upon completion of the Ph.D. prior to August 1, 2011. The candidate should submit a letter of application and describe their current research, a vita, three letters of recommendation, and sample of work.
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. The University’s 245-acre campus is located in Morningside Heights on the Upper West Side.

Candidates should apply online at: academicjobs.columbia.edu/apply/Cent ralQuickFind=54003 and should submit the following curriculum vitae including a publication list, a statement of research interests and plans, a statement of teaching philosophy, names with contact information of three references, and up to four pre/ prospects. Applicants can contact: cs.columbia.edu for more information about the department.

The position will close no sooner than December 31, 2010, and will remain open until filled. Columbia University is an Equal Opportunity/Affirmative Action employer

Cornell University
School of Electrical and Computer Engineering
Tenure-Track Faculty Position

The School of Electrical and Computer Engineering at Cornell is seeking an outstanding candidate to join our Faculty. Cornell University is an innovative, interdisciplinary research university with a distinctive emphasis on healthcare, mobility, and energy. High priority is given to candidates whose research and teaching interests align with the following research areas:

- Computational Biochemistry
- Scientific Software Development in
  - Data-intensive distributed systems, cloud computing, distributed databases, or
  - Closely related areas.

Cornell University welcomes applications from women and minorities to apply. Cornell University seeks to meet the needs of dual career couples, has a Dual Career program, and is committed to diversity. Applicants should submit a letter of interest, curriculum vitae, three recent publications, and names and contact information for at least three references. Applications will receive full consideration. The closing date for receipt of applications is January 1, 2011. Applications received by January 14, 2011 will receive full consideration.

The School of Electrical and Computer Engineering, and the College of Engineering at Cornell are committed to diversity and seek candidates who will create a climate that attracts and retains a diverse faculty, staff, and students. Cornell University is an equal opportunity/affirmative action employer.

D. E. Shaw Research
Scientific Software Development in
Computational Biochemistry

Exceptionally well-qualified individuals with above-market achievement. We anticipate hiring at all academic ranks; candidates for tenure-track assistant professor positions, but suitably qualified candidates for senior positions will also be considered. Applicants should have a proven record (or promise) of excellence in both research and teaching. Ideal candidates will have multidisciplinary interests and will be appointed jointly across departments/schools. Applications consisting of a CV, research statement, teaching statement, and three letters of recommendation directly from referees should be sent via email to Dr. Thomas R. Sellis. Informal inquiries are also invited by email.

The following documents are required: 1) a letter introducing the applicant, 2) a curriculum vitae, 3) up to four recent publications, and 4) names and contact information for at least three references. Applications will receive full consideration. The closing date for receipt of applications is January 1, 2011. Applications received by January 14, 2011 will receive full consideration.

The School of Computer and Communication Sciences at EPFL is seeking candidates for faculty positions in computer science. We are primarily seeking candidates for tenure-track assistant profes sor positions, but suitably qualified candidates for senior positions will also be considered. Successful candidates will develop an independent and creative research program, participate in both undergraduate and graduate teaching, and supervise PhD students.

EPFL offers internationally competitive salaries, significant start-up resources, and outstanding research infrastructure. To apply, please follow the application procedure at: http://recruiter.epfl.ch. The following documents are required: 1) CV (including a list of publications and a brief statement of major research contributions), 2) brief statements of research and teaching interests, names and addresses (including e-mail) of 3 references for junior positions, and 6 for senior positions. Screening will start on January 1, 2011. Further questions can be addressed to: Professor Willy Zwaenepoel Dean School of Computer and Communication Sciences EPFL CH-1015 Lausanne, Switzerland recruiting@epfl.ch For additional information on EPFL, please consult: http://www.epfl.ch or http://epfl.epfl.ch

EPFL is an equal opportunity employer.
Professional Opportunities

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology in Zurich

Assistant Professorships (Tenure Track) in Computer Science

The Department of Computer Science (www.inf.ethz.ch) at ETH Zurich invites applications for assistant professorships (Tenure Track) in the areas of:

- Computer Systems
- Computational Science
- Human Computer Interaction
- Software Engineering

The department offers a stimulating and support environment. Collaboration in research and teaching is expected between the department and other groups at ETH Zurich and related institutions.

Applicants should have internationally recognized expertise in their field and pursue research at the forefront of Computer Science. Successful candidates should establish and lead a strong research program. They will be expected to supervise Ph.D. students and teach both undergraduate level courses (in German or English) and graduate level courses (in English).

Assistant professorships have been established to promote the careers of younger scientists. The initial appointment is for four years with the possibility of renewal for an additional two-year period and promotion to a permanent position.

Please address your application together with a curriculum vitae, a list of publications, a statement of research and teaching interests and the names of at least three referees to the President of ETH Zurich, Prof. Dr. Ralph Eichler, no later than February 15, 2011. For further information, candidates may contact the Head of the Department, Prof. F. Martin (the Head of the Computer Science/Informatics Section). Candidates with a view towards increasing the number of female professors ETH Zurich specifically encourage qualified female candidates to apply. In order to apply for one of these positions, please visit: www.facultyaffairs.ethz.ch

ETH

Ecole Polytechnique Fédérale de Lausanne
School of Computer and Communication Sciences
Postdoc / Research Scientist

A postdoc position will become available shortly at Willi Zwaenepoel’s research group. The group does research in many aspects of software systems, see http://labos.epfl.ch for more information.

We are seeking a candidate to work on an ongoing project concerning integration of database systems into Java, specifically taking advantage of Java’s newly proposed functional programming facilities. We are seeking someone with a Ph.D. in computer science (or equivalent) and expertise in the above areas. The project involves programming language design as well as implementation. Besides working on this project, the person will also be able to pursue his own research agenda.

The initial appointment is for a year and renewable on an annual basis.

Review of applicants will start immediately and continue until the position is filled. The application package should contain a CV along with contact information for 3 referees, and a short statement describing research experiences with emphasis on the possible relevance to the topic areas.

The documents in PDF format should be sent to: madeleine.robert@epfl.ch

Florida International University (FIU)
College of Engineering and Computing

The Department of Computer Science & Engineering at Florida International University invites applications at the assistant professor level in the area of networking and software engineering. This is a 9-month, non-tenure track position with a start date negotiable. The successful candidate will be expected to develop their research, collaborate within the department and with other groups at FIU and related institutions.

Applications are invited from candidates with a Ph.D. in Computer Science, Computer Engineering or a closely related area. The candidate should have an excellent publications record and a high-quality research program. All positions must have an active and proven track record of research excellence in networking and software engineering. Ideal candidates would have an interdisciplinary background, and be able to provide leadership and vision in a growing academic department with strong research potential.

HOW TO APPLY:
- Send a letter of nomination, including the name, address, business and home telephone numbers, and e-mail addresses.
- Submit a letter describing relevant experiences and interest in the position; a resume; and the names of five references.

Letters of nominations should be sent directly to the FIU J.O.B.S Link website at http://www.fiu.edu/jobs

Florida International University

Florida International University (FIU)
College of Engineering and Computing

FIU is a multi-campus public research university with approximately 45,000 students, located in a bustling international trade, and youthful, globally connected 24/7 city. Miami’s captivating skyline, tropical climate, and diverse neighborhoods, trendy South Beach scene, bustling international trade, and youthful exuberance provides a perfect environment for our engaged university.

The documents in PDF format should be sent to: madeleine.robert@epfl.ch

Florida International University (FIU)
College of Engineering and Computing

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. The College of Engineering and Information Sciences (CIS) is a rapidly growing program of excellence at the University, with 32 faculty members and over 1,600 students, including over 90 Ph.D. students. CIS offers B.S., M.S., and Ph.D. degrees in Computer Science, an M.S. degree in Telecommunications and Networking, and B.S., B.A., and M.S. degrees in Information Technology.

CIS has received approximately $5.5 million in the last two years in external research funding, has several research centers, and supports a strong computing infrastructure and support, and enjoys broad and dynamic industry and international partnerships.

Florida International University

Florida International University

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. The College of Engineering and Information Sciences (CIS) is a rapidly growing program of excellence at the University, with 32 faculty members and over 1,600 students, including over 90 Ph.D. students. CIS offers B.S., M.S., and Ph.D. degrees in Computer Science, an M.S. degree in Telecommunications and Networking, and B.S., B.A., and M.S. degrees in Information Technology.

CIS has received approximately $5.5 million in the last two years in external research funding, has several research centers, and supports a strong computing infrastructure and support, and enjoys broad and dynamic industry and international partnerships.

Florida International University

Florida International University

Florida International University (FIU)
College of Engineering and Computing

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. The College of Engineering and Information Sciences (CIS) is a rapidly growing program of excellence at the University, with 32 faculty members and over 1,600 students, including over 90 Ph.D. students. CIS offers B.S., M.S., and Ph.D. degrees in Computer Science, an M.S. degree in Telecommunications and Networking, and B.S., B.A., and M.S. degrees in Information Technology.

CIS has received approximately $5.5 million in the last two years in external research funding, has several research centers, and supports a strong computing infrastructure and support, and enjoys broad and dynamic industry and international partnerships.
Professional Opportunities

HOW TO APPLY: Applications consisting of a letter of interest, contact information, curriculum vitae, and the names of at least three references, should be submitted to the IJU at: J.O.B.S. Link website at https://www.ijou.co. Applications will be reviewed and accepted until January 17, 2011, and will continue until the position is filled. Further information can be obtained from the School website at http://www.fiu.edu, or by e-mail to recruit@cs.fiu.edu.

FIU is an equal opportunity/affirmative action employer. Applicants should have recognized research leadership, as well as a strong record in research management and interest in success at government and institutional fundraising. Experience with international collaborations, and familiarity with a plus. Applications should include a resume, selected publications, and names of three references. Review begins February 1, 2011; candidates are urged to apply by that date. To learn more about ICSI, go to http://www.icsi.berkeley.edu.

To apply for this position, send the above material to: College of Science, University of Tennessee-Knoxville, 2121 Cumberland Avenue, Knoxville, TN 37996, or email the names of at least three references to: search@cs.utm.edu. Applications from women and minorities are especially encouraged.

Kansas State University
Department of Computing and Information Sciences
FACULTY POSITION
The Department of Computing and Information Sciences at Kansas State University invites applications for an Assistant Professor beginning Fall 2011. The Department can be found at the URL http://www.cis.ksu.edu/. The position is open to candidates at any level. The deadline for application is January 15, 2011.

The George Washington University
Department of Computing & Information Sciences
Assistant Professor - Tenured Rank
The Department of Computer Science in the Volgenau School of Information Technology & Engineering at George Mason University invites applications for a faculty position at the rank of Full, Associate, or Assistant Professor beginning in Fall 2011, or until the position is filled. The firm position is in information security and assurance. Minimum qualifications for the position include a Ph.D. in Computer Science or a related field, demonstrated potential for excellence in research and teaching, and a commitment to high quality teaching.

Applicants for a senior position need a well-established track record of substantial research contributions to their field, externally funded research, and leadership. For full consideration please submit application and application materials on-line at http://pgs.gmu.edu (position number 07-1014). Please include a letter of interest, a statement of professional goals including your perspective on teaching and research, a complete C.V. with publications, and the names and addresses of at least three references. Review of applications will begin immediately and will continue until the position is filled. For more information on the department, visit our website at: http://www.gmu.edu/csis. GMU is an equal opportunity/affirmative action employer. Women and minorities strongly encouraged.

The George Washington University
Department of Computer Science
Tenure-Track Assistant Professor Position
The Department of Computer Science at The George Washington University is seeking applications for faculty positions in the areas of security, systems, and AI. The first is a tenure-track Assistant Professor position in Computer Science beginning Fall 2011. Excellence in research, teaching and obtaining external funding is expected. While strong candidates in all areas of computer science will be considered, applicants from general data areas such as database, data mining, information security, information retrieval, and data understanding and processing are particularly encouraged. The Department offers B.S., M.S., and Ph.D. degrees in Computer Science and has research strengths in distributed systems, information retrieval, computer networking, intelligent information systems and algorithms. The Illinois Institute of Technology, located within 10 minutes of downtown Chicago, is a dynamic and innovative institution. The Department has strong connections to Fermi and Argonne National Laboratories, and to local industry, and is on a successful and aggressive recruitment plan. It is an equal opportunity/affirmative action employer. Women and Underrepresented Minorities are strongly encouraged to apply.

Applications will start on December 1, 2010 and will continue until the position is filled. The Department will consider applications until the position is filled. All applications should include a CV, a statement of research and teaching interests, (i) a brief cover letter that clearly indicates the rank of interest, (ii) a curriculum vitae, (iii) a statement of research and teaching interests, (iv) complete contact information for at least three references, and optionally (v) other relevant supporting materials. If by regular mail, applications should be sent to: Chair, Faculty Search Committee Department of Computer Science, PHL 207, The George Washington University W. D.C. 20052. Only complete applications will be considered. Inquiries about applying will be accorded the utmost discretion.

The University of Illinois at Chicago invites applications and nominations for an Associate, or Assistant Professor beginning Fall 2011. The University of Illinois at Chicago is one of the nation’s largest IT areas in the nation’s capital with close access to many Federal funding agencies and research laboratories. The Department offers comprehensive programs of undergraduate and graduate liberal arts studies as well as Ph.D. programs in computer science, including public health, education, business and international affairs. A private institution, UIC enjoys a strong focus on research, quality education, and low-student-teacher ratios. The exceptional location affords the opportunity for collaboration with the Department of Computer Science."
Loyola University Maryland

Loyola University Maryland invites applications for the position of Claire Boothe Luce Professor in the Department of Computer Science, with an expected start date of fall 2011 at the level of Assistant Professor. We are seeking an enthusiastic individual committed to excellent teaching and a continuing, productive research career. A Ph.D. in Computer Science, Computer Engineering, or a closely related field is required. Candidates in areas of specialization will be considered. The position is restricted by the Claire Boothe Luce bequest to the Henry Luce Foundation to women who are U.S. citizens. Duties of the position will include: 1) teach undergraduate and graduate computer science courses (the course load is typically six courses per year, with a reduced load in the last one to two years, and a guaranteed research leave after successful midterm review); 2) conduct research in computer science and establish a record of scholarly, peer-reviewed work; 3) provide service to the department and the University. The successful applicant will have a Ph.D. in computer science or a closely related field. We encourage applications from women and minority groups. The department maintains an active research program with funding from NSF, NEH, and other sources.

Applications should include a letter of application, curriculum vitae, statement of research and teaching interests, and three letters of recommendation. Review of applications will commence immediately and continue until the position is filled. Submit application material at: www.careersluc.edu/applicants/CentralQuickFind-53541

Loyola is an Equal Opportunity/Affirmative Action employer and is committed to fostering a diverse and inclusive academic community. Background checks are required.

Loyola University Chicago

Loyola University Chicago, College of Arts and Science, Department of Computer Science invites applications for a tenure-track position in Computer Science at the Assistant Professor level. The department is seeking enthusiastic candidates with scholarly excellence as well as individual growth and service to others. The department has been recognized nationally for its commitment to the support of technology and is ranked among the top ten comprehensive universities in the North by US News and World Report. The BSE in Computer Science has been ABET accredited since 1989. The department offers Masters degrees in Computer Science and in Software Engineering, and most of the eight members of the department teach on both the undergraduate and graduate level. The department successfully combines high quality, undergraduate education with successful, externally funded faculty research. All classes are small (less than 35, continued on next page...)

Please send applications to:
Chair of the Recruiting Committee
Department of Computing and Information Sciences
234 Nichols Hall
Kansas State University
Manhattan, KS 66506
(Email: Recruiting@cis.ksu.edu)
Review of applications will commence January 3, 2011 and continue until the position is filled.

Kansas State University is an Equal Opportunity/Employer and actively seeks diversity among its employees.

Loyola University Maryland

Loyola University Maryland invites applications for the position of Claire Boothe Luce Professor in the Department of Computer Science, with an expected start date of fall 2011 at the level of Assistant Professor. We are seeking an enthusiastic individual committed to excellent teaching and a continuing, productive research career. A Ph.D. in Computer Science, Computer Engineering, or a closely related field is required. Candidates in areas of specialization will be considered. The position is restricted by the Claire Boothe Luce bequest to the Henry Luce Foundation to women who are U.S. citizens. Duties of the position will include: 1) teach undergraduate and graduate computer science courses (the course load is typically six courses per year, with a reduced load in the last one to two years, and a guaranteed research leave after successful midterm review); 2) conduct research in computer science and establish a record of scholarly, peer-reviewed work; 3) provide service to the department and the University. The successful applicant will have a Ph.D. in computer science or a closely related field. We encourage applications from women and minority groups. The department maintains an active research program with funding from NSF, NEH, and other sources.

Applications should include a letter of application, curriculum vitae, statement of research and teaching interests, and three letters of recommendation. Review of applications will commence immediately and continue until the position is filled. Submit application material at: www.careersluc.edu/applicants/CentralQuickFind-53541

Loyola is an Equal Opportunity/Affirmative Action employer and is committed to fostering a diverse and inclusive academic community. Background checks are required.

Loyola University Chicago

Loyola University Chicago, College of Arts and Science, Department of Computer Science invites applications for a tenure-track position in Computer Science at the Assistant Professor level. The department is seeking enthusiastic candidates with scholarly excellence as well as individual growth and service to others. The department has been recognized nationally for its commitment to the support of technology and is ranked among the top ten comprehensive universities in the North by US News and World Report. The BSE in Computer Science has been ABET accredited since 1989. The department offers Masters degrees in Computer Science and in Software Engineering, and most of the eight members of the department teach on both the undergraduate and graduate level. The department successfully combines high quality, undergraduate education with successful, externally funded faculty research. All classes are small (less than 35, continued on next page...)

Please send applications to:
Chair of the Recruiting Committee
Department of Computing and Information Sciences
234 Nichols Hall
Kansas State University
Manhattan, KS 66506
(Email: Recruiting@cis.ksu.edu)
Review of applications will commence January 3, 2011 and continue until the position is filled.

Kansas State University is an Equal Opportunity/Employer and actively seeks diversity among its employees. Background checks are required.

Loyola University Maryland

Loyola University Maryland invites applications for the position of Claire Boothe Luce Professor in the Department of Computer Science, with an expected start date of fall 2011 at the level of Assistant Professor. We are seeking an enthusiastic individual committed to excellent teaching and a continuing, productive research career. A Ph.D. in Computer Science, Computer Engineering, or a closely related field is required. Candidates in areas of specialization will be considered. The position is restricted by the Claire Boothe Luce bequest to the Henry Luce Foundation to women who are U.S. citizens. Duties of the position will include: 1) teach undergraduate and graduate computer science courses (the course load is typically six courses per year, with a reduced load in the last one to two years, and a guaranteed research leave after successful midterm review); 2) conduct research in computer science and establish a record of scholarly, peer-reviewed work; 3) provide service to the department and the University. The successful applicant will have a Ph.D. in computer science or a closely related field. We encourage applications from women and minority groups. The department maintains an active research program with funding from NSF, NEH, and other sources.

Applications should include a letter of application, curriculum vitae, statement of research and teaching interests, and three letters of recommendation. Review of applications will commence immediately and continue until the position is filled. Submit application material at: www.careersluc.edu/applicants/CentralQuickFind-53541

Loyola is an Equal Opportunity/Affirmative Action employer and is committed to fostering a diverse and inclusive academic community. Background checks are required.

Loyola University Chicago

Loyola University Chicago, College of Arts and Science, Department of Computer Science invites applications for a tenure-track position in Computer Science at the Assistant Professor level. The department is seeking enthusiastic candidates with scholarly excellence as well as individual growth and service to others. The department has been recognized nationally for its commitment to the support of technology and is ranked among the top ten comprehensive universities in the North by US News and World Report. The BSE in Computer Science has been ABET accredited since 1989. The department offers Masters degrees in Computer Science and in Software Engineering, and most of the eight members of the department teach on both the undergraduate and graduate level. The department successfully combines high quality, undergraduate education with successful, externally funded faculty research. All classes are small (less than 35, continued on next page...)

Please send applications to:
Chair of the Recruiting Committee
Department of Computing and Information Sciences
234 Nichols Hall
Kansas State University
Manhattan, KS 66506
(Email: Recruiting@cis.ksu.edu)
Review of applications will commence January 3, 2011 and continue until the position is filled.

Kansas State University is an Equal Opportunity/Employer and actively seeks diversity among its employees. Background checks are required.

Loyola University Maryland

Loyola University Maryland invites applications for the position of Claire Boothe Luce Professor in the Department of Computer Science, with an expected start date of fall 2011 at the level of Assistant Professor. We are seeking an enthusiastic individual committed to excellent teaching and a continuing, productive research career. A Ph.D. in Computer Science, Computer Engineering, or a closely related field is required. Candidates in areas of specialization will be considered. The position is restricted by the Claire Boothe Luce bequest to the Henry Luce Foundation to women who are U.S. citizens. Duties of the position will include: 1) teach undergraduate and graduate computer science courses (the course load is typically six courses per year, with a reduced load in the last one to two years, and a guaranteed research leave after successful midterm review); 2) conduct research in computer science and establish a record of scholarly, peer-reviewed work; 3) provide service to the department and the University. The successful applicant will have a Ph.D. in computer science or a closely related field. We encourage applications from women and minority groups. The department maintains an active research program with funding from NSF, NEH, and other sources.

Applications should include a letter of application, curriculum vitae, statement of research and teaching interests, and three letters of recommendation. Review of applications will commence immediately and continue until the position is filled. Submit application material at: www.careersluc.edu/applicants/CentralQuickFind-53541

Loyola is an Equal Opportunity/Affirmative Action employer and is committed to fostering a diverse and inclusive academic community. Background checks are required.

Loyola University Chicago

Loyola University Chicago, College of Arts and Science, Department of Computer Science invites applications for a tenure-track position in Computer Science at the Assistant Professor level. The department is seeking enthusiastic candidates with scholarly excellence as well as individual growth and service to others. The department has been recognized nationally for its commitment to the support of technology and is ranked among the top ten comprehensive universities in the North by US News and World Report. The BSE in Computer Science has been ABET accredited since 1989. The department offers Masters degrees in Computer Science and in Software Engineering, and most of the eight members of the department teach on both the undergraduate and graduate level. The department successfully combines high quality, undergraduate education with successful, externally funded faculty research. All classes are small (less than 35, continued on next page...)

Please send applications to:
Chair of the Recruiting Committee
Department of Computing and Information Sciences
234 Nichols Hall
Kansas State University
Manhattan, KS 66506
(Email: Recruiting@cis.ksu.edu)
Review of applications will commence January 3, 2011 and continue until the position is filled.

Kansas State University is an Equal Opportunity/Employer and actively seeks diversity among its employees. Background checks are required.
Professional Opportunities

Mississippi State University
Department of Computer Science and Engineering

The Department

Applications and nominations are being sought for the Head of the Department of Computer Science and Engineering (www.cse.msstate.edu) at Mississippi State University. This is a 12-month tenure-track position.

The successful Head will provide:

• Vision and leadership for nationally recognized computer education and research programs
• Exceptional academic and administrative skills
• A strong commitment to faculty recruitment and development

Applicants must have a Ph.D. in computer science, software engineering, computer engineering, or a closely related field. The successful candidate must have earned national recognition by a distinguished record of accomplishments in computer science education and research. Demonstrated administrative experience is desirable, as is teaching experience at both the undergraduate and graduate levels. The successful candidate must qualify for the rank of associate professor.

Please provide a letter of application outlining your experience and vision for this position, a curriculum vita, and names and contact information of at least three professional references. Application materials should be submitted online at http://www.jobs.msstate.edu/.

Screening of candidates will begin February 15, 2011 and will continue until the position is filled. Mississippi State University is an AA/EOE institution. Qualified minorities, women, and people with disabilities are encouraged to apply.

Program in Intelligent Systems

The University of Mississippi

The College of Engineering at the University of Mississippi invites applications for an Associate Research Staff Member position in the area of Computer Systems. The group engages in research in all aspects of storage systems software, including file systems, storage interfaces, and computer architecture. The group conducts research in support of NEC’s software engineering and computer system management interests.

The position is available as of January 1, 2011, and candidates are encouraged to apply immediately.

Applicants should have a Ph.D. in computer science, software engineering, computer engineering, or a closely related field. Experience and demonstrated excellence teaching at the college level is desirable. Review of applications will begin February 1, 2011, and continue until the position is filled. However, the position may close when an adequate number of qualified candidates are received.

The University of Mississippi is an Equal Opportunity/Affirmative Action employer. Women and minorities are strongly encouraged to apply.

Northeastern University

The Computer Science Department at Northeastern University invites applications for a tenure-track position at the assistant professor level, with appointment starting in the fall of 2011. This is a new position. Applications are encouraged from women and minorities.

The successful candidate will have a Ph.D. in computer science or a closely related area. Review of applications will begin January 2011 and continue until the position is filled. Interested candidates should send a CV, positions of interest, and contact information for three letters of reference to: Dean Nicola Yovanow, Search Committee Chair (617-373-9122 or younan@com.soe.northeastern.edu).

Computing Systems Group

The University of Massachusetts

Applications are invited for an Nontenure-Track Faculty position in the area of Operating Systems and Distributed Systems. The program covers many areas, reflecting the breadth of the field and the full range of current computer systems research. The successful candidate will be expected to conduct research in any areas of Computer Science, to demonstrate in industrial settings, to initiate and maintain collaborations with academic and industrial researchers, and to participate in the Ph.D. program.

Applications are encouraged from candidates with strong publication records on the following areas:

• heterogeneous cluster architectures
• parallel programming models and runtimes
• key technologies to accelerate performance and low power consumption of enterprise applications on heterogeneous clusters

The Storage Systems department engages in research on many different aspects of storage systems software, including file systems, storage interfaces, and computer architecture. In addition to this primary research focus, the group is engaged in research and development for the international research community. Applicants must demonstrate competency at least one of the following areas:

• distributed systems and networks
• operating systems and middleware
• performance, reliability, and dependability.
Northern University is an Equal Opportunity/Affirmative Action University. We strongly encourage applications from women and minorities.

Northeastern University, Boston, Massachusetts

The College of Computer and Information Science and the Bionz College of Health Sciences invite applications for a faculty position in Health Informatics at Ph.D. level in Health and Medical Informatics, Computer Science, Information Science, or a health-related discipline, together with a proven ability to secure grant funding for research using advanced technology in the health domain, is required.

Building upon our successful joint Master of Science degree program in Health Information Management, we are searching for someone to participate in our interdisciplinary faculty searches in Health Management, health systems engineering, and Health and Administration.

We are particularly interested in faculty candidates who can create and/or complement our work in these areas. Topics of interest include the use of mobile technologies to monitor and manage health, the use of virtual agents for physical health and mental health management, the development of assistive technologies to improve functional abilities of people with disabilities, behavioral informatics and assistive technologies, and we are particularly interested in faculty candidates who can create and/or complement our work in these areas. Topics of interest include the use of mobile technologies to monitor and manage health, the use of virtual agents for physical health and mental health management, the development of assistive technologies to improve functional abilities of people with disabilities, behavioral informatics and assistive technologies.
Professional Opportunities

For tenure-track positions at the assistant professor level beginning Fall 2011. Outstanding candidates in all areas of Computer Science will be considered. Specific areas of interest include theory and software engineering. Candidates with a multi-disciplinary focus are encouraged to apply.

The Department of Computer Science offers a stimulating and nurturing academic environment. Postdoctoral faculty members direct research programs in algorithms, information security, databases, distributed and parallel computing, graphics and visualization, information security, machine learning, networking, operating systems, and compilers, scientific computing, and software engineering. Information about the department and a detailed description of the open positions are available at http://www.cs.purdue.edu.

All candidates 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. The successful candidate will be expected to teach courses in computer science, conduct research in field of expertise and participate in other department and university activities. Salary is competitive. Applications are encouraged. Applicants are strongly encouraged to apply online at http://hirings.purdue.edu. Hard copy applications can be sent to:

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

Review of applications will begin on November 10, 2010, and will continue until the positions are filled. Women and underrepresented minorities are strongly encouraged to apply. Purdue University is an Equal Opportunity/Affirmative Action employer fully committed to achieving a diverse workforce.

Rochester Institute of Technology
Computing and Information Sciences
Faculty Position in Computer Science

Rochester Institute of Technology’s B. Thomas Golisano College of Computing and Information Sciences is currently accepting applications and nominations for the following positions:

A tenure-track faculty position in the Interactive Games and Media department is focused at the tenure-track assistant professor level. The position is a three-year term position (as an MFA) in computer or a related field, is expected to be a record of publications disseminated by schools and colleges, or creative work, or demonstrated potential for future scholarship. Experience in game or interactive media industries and/or public disseminated work related to games or interactive media.

A tenure-track faculty position in the Software Engineering department is expected to be a record of publications and presentations. The position is available for the PhD in computer science and software engineering.

Applicants must have an interest in a workload balanced between a strong interest in teaching, including curriculum development at the undergraduate and graduate levels, discipline-based research, and interdisciplinary research, with publications and the pursuit of external funding; and service commitments.

A tenured-track faculty position in the Ph.D. program supporting research in software engineering (phd.gcis.nitt.edu) is expected.

Applicants must have an outstanding research record in software engineering. Our department is committed to excellence in teaching and research, with a strong emphasis on theory and practical aspects of cybersecurity as applied to specific problems across multiple domains. We are looking to build research strength in cybersecurity, to complement and support our growing strengths in biomedical imaging and computing, computer security and information assurance, computer science, scientific computing, and service sciences. The responsibilities will include teaching software engineering courses including courses in the candidate’s area of specialization, research, student advising, and service.

A PhD in related computing discipline is required for IRC#41000 and IRC#42615. Experience in any and all areas of software engineering will be considered. The Golisano College of Computing and Information Sciences is committed to the inclusion of the Computer Science, Software Engineering, Information Sciences and Technology (SE) and Networking, Security, and Systems Administration departments, as well as the Office of Information Technology.

Candidates should have experience in areas of Information Technologies. The College has over 105 faculty and over 2400 undergraduate and 600 graduate students.

Candidates should visit http://current.rit.edu and refer to the IRC number listed above for specific information about the position and the application process. Refer to www.rit.edu for information about RIT and the B. Thomas Golisano College of Computing and Information Sciences.

R • 1 • 7 –Selected as one of the top colleges in the U.S. by U.S. News

Southwestern University
Assistant Professor of Computer Science

The Department of Computer Science and Engineering in the Lyle School of Engineering at Southern Methodist University invites applications for a faculty position in computer engineering beginning Fall 2011. Individuals with experience and research interests in all areas of computer science and engineering are encouraged to apply. Priority will be given to individuals with expertise and research interest in computer security, including system software and/or hardware architectures, information assurance, secure embedded systems and control, and related areas. The search is focused at the tenured-track assistant professor level. The successful candidate must have or expect to have a PhD in computer science, computer engineering, or a related area by date of hire.

Successful applicants will demonstrate a deep commitment to research activity in computer science and engineering and a strong potential for excellence in teaching.

The Dallas/Fort Worth area, one of the top three high-tech industrial centers in the country, has high concentrations of telecommunications corporations in the US, providing abundant opportunities for industrial research, cooperation and consulting. Dallas/Fort Worth is a multicultural business and high-tech community, offering a rich cultural heritage, diverse cultural attractions, and a vibrant economy.

The Center for Software Engineering resides within the Bobby L. Bly School of Engineering and offers BS, MS, and PhD degrees in Computer Engineering, Software Engineering, the Doctor of Engineering in software engineering, and the MS in Security Engineering & Technology. The department currently has 15 faculty members with research concentrations in security, software engineering, computer networks, telecommunications, data mining, database systems, VLSI, and emerging systems, computer architecture and bioinformatics. Additional information may be found at: www.lyle.smu.edu/ce.

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

cse@smu.edu

cse Faculty Search, Position #531269

SMU
Dallas, TX 75277-0122

The committee will begin its review of the applications on or about December 1, 2010. To ensure full consideration, applications must be time and date stamped before December 1, 2010. However, the committee will continue to accept applications until all positions are 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 sex for all educational programs and services.

Hiring is contingent upon the satisfactory completion of a background check.

Stony Brook University
Faculty Position in Computational Science and Engineering

Stony Brook University’s (SBU) Department of Computer Science and the New York Center for Computational Sciences (NYCCS) invites applications for a joint tenured-track faculty position in the area of computational science and engineering to complement the development of New York State. NYCCS is part of Tata Consultancy Services Ltd, one of the world’s largest IT companies. NYCCS will be located in Stony Brook, New York, and will be a vibrant and dynamic environment for computational scientists.

Specific areas of interest include algorithms; formal methods; model-driven software engineering; program verification; requirements and analysis; distributed computing; parallel computing; software testing; distributed/supervised systems and architectures; data parallelism; data mining and machine learning; information extraction and retrieval; decision support systems; and bioinformatics.

The Lab is one of India’s premier R&D organizations in the US, providing services to Tata Consultancy Services and is part of Tata Consultancy Services Ltd, the largest Indian IT company. R&D work is focused on the creation of intellectual assets that address some of the most challenging problems faced by the IT industry and, more generally, by the computational science research community. You can collaborate with academics, start-ups, industrial partners, TCS clients, and enthusiasts; publish R&D results in top-tier conferences/journals and instanlize your findings in commercial software, products and services. The Lab offers a friendly and informal research environment. You can also pursue your PhD while working at the Lab.

If you have a top-flight academic record and a passion for R&D, come join the US Center of Tata Consultancy Services! You would be working with “Opportunities” as the subject. For details view: http://www.tcs-tedl.com

Towson University
Department of Computer and Information Sciences
Faculty Positions

The Department of Computer and Information Sciences at Towson University invites applications for tenure-track faculty positions in its Computer Science (CS) and Information Technology (IT) programs. Selected candidates will be expected to teach undergraduate and graduate courses, participate in department activities, conduct research, and supervise graduate students.

Applicants should submit a letter of application, current resume, copies of graduate transcripts, a recent research paper, and the name, address, phone and email address of three references to:

cssearch@towson.edu

Review of applications will begin on January 15, 2011 and continue until the positions are filled.

Towson University is an equal opportunity/affirmative action employer. Full position announcements available at: https://hiring.towson.edu/employment/
Yahoo! 

Visiting Assistant Professor 

Computing Research News January 2011

research credentials. We have strong teaching credentials as well as a commitment to this area of research and funding. Allied expertise in Artificial Intelligence building at UCSB, which includes a unique computer science program, the Allosphere, a three-story spherical science (Division of Humanities and Fine Arts) and the College of Engineering. MAT offers Master’s and PhD degrees and has approximately 40 graduate students and 10 faculty, several with joint appointments in engineering and arts/communications departments. Areas of expertise include humanities and the digital humanities, electronic music and sound design, computational visual and spatial arts, and multimedia data processing and analysis. Applicants are expected to hold a doctoral degree in Arts and Sciences, Computers, or a closely related field, have demonstrated excellence in research, and have a strong commitment to teaching and interdisciplinary scholarship and/or creative activity.

The department is especially interested in candidates who can contribute to the diversity and excellence of the academic community through their teaching, research, and service. Primary consideration will be given to applications received by February 1, 2011; however, the position will remain open until filled. Applications must include a CV, research and teaching statements, and at least three letters of reference. See http://www.mat.ucsb.edu/ for information about the department and graduate program. Send applications to:

Search Committee
Emulex Career Development Chair
The Henry Samueli School of Engineering
University of California, Irvine
115A Campbell Hall
115A Campbell Hall
University of the District of Columbia
1300 University Blvd
3212 15th St. NW
Washington, DC 20009

Applications are especially encouraged in the following areas: bioinformatics, computational science and engineering, cyberphysical autonomous systems, database systems, cybersecurity, computer security, computer systems, computer vision, data management, data mining, and systems security. We are particularly interested in candidates with practical research experience in the following areas: Information Assurance and Systems (IA&S). NSA CAE/IAE/R experience is a plus. Candidates who have strong practical expertise in Confidentiality, Integrity, and Availability in Technology, Policy & Law are especially encouraged to apply.

Cloud computing or mobile computing specializations will be plus. Faculty duties include teaching undergraduate and graduate students, conducting high-quality research by collaborating closely with the department’s IA team, developing externally funded research projects and IT curricula, and providing service to the university, state, and federal governments.

The University of the District of Columbia is an affirmative action/ equal opportunity employer and strongly encourages minority candidates and women to apply. The University of the District of Columbia is an Economic Powerhouse in the District of Columbia. UDC is the only public university in the District of Columbia.

It is the only public university in the District of Columbia.

Historically Black College and University. It is the only public university in the District of Columbia.

The University of the District of Columbia is an Economic Powerhouse in the District of Columbia. UDC is the only public university in the District of Columbia.

Applications are especially encouraged in the following areas: bioinformatics, computational science and engineering, cyberphysical autonomous systems, database systems, cybersecurity, computer security, computer systems, computer vision, data management, data mining, and systems security. We are particularly interested in candidates with practical research experience in the following areas: Information Assurance and Systems (IA&S). NSA CAE/IAE/R experience is a plus. Candidates who have strong practical expertise in Confidentiality, Integrity, and Availability in Technology, Policy & Law are especially encouraged to apply. Cloud computing or mobile computing specializations will be plus. Faculty duties include teaching undergraduate and graduate students, conducting high-quality research by collaborating closely with the department’s IA team, developing externally funded research projects and IT curricula, and providing service to the university, state, and federal governments.

The University of the District of Columbia is an affirmative action/ equal opportunity employer and strongly encourages minority candidates and women to apply. The University of the District of Columbia is an Economic Powerhouse in the District of Columbia. UDC is the only public university in the District of Columbia.

It is the only public university in the District of Columbia.

Historically Black College and University. It is the only public university in the District of Columbia.

The University of the District of Columbia is an Economic Powerhouse in the District of Columbia. UDC is the only public university in the District of Columbia.

Applications are especially encouraged in the following areas: bioinformatics, computational science and engineering, cyberphysical autonomous systems, database systems, cybersecurity, computer security, computer systems, computer vision, data management, data mining, and systems security. We are particularly interested in candidates with practical research experience in the following areas: Information Assurance and Systems (IA&S). NSA CAE/IAE/R experience is a plus. Candidates who have strong practical expertise in Confidentiality, Integrity, and Availability in Technology, Policy & Law are especially encouraged to apply. Cloud computing or mobile computing specializations will be plus. Faculty duties include teaching undergraduate and graduate students, conducting high-quality research by collaborating closely with the department’s IA team, developing externally funded research projects and IT curricula, and providing service to the university, state, and federal governments.

The University of the District of Columbia is an affirmative action/ equal opportunity employer and strongly encourages minority candidates and women to apply. The University of the District of Columbia is an Economic Powerhouse in the District of Columbia. UDC is the only public university in the District of Columbia.

It is the only public university in the District of Columbia.

Historically Black College and University. It is the only public university in the District of Columbia.

The University of the District of Columbia is an Economic Powerhouse in the District of Columbia. UDC is the only public university in the District of Columbia.

Applications are especially encouraged in the following areas: bioinformatics, computational science and engineering, cyberphysical autonomous systems, database systems, cybersecurity, computer security, computer systems, computer vision, data management, data mining, and systems security. We are particularly interested in candidates with practical research experience in the following areas: Information Assurance and Systems (IA&S). NSA CAE/IAE/R experience is a plus. Candidates who have strong practical expertise in Confidentiality, Integrity, and Availability in Technology, Policy & Law are especially encouraged to apply. Cloud computing or mobile computing specializations will be plus. Faculty duties include teaching undergraduate and graduate students, conducting high-quality research by collaborating closely with the department’s IA team, developing externally funded research projects and IT curricula, and providing service to the university, state, and federal governments.

The University of the District of Columbia is an affirmative action/ equal opportunity employer and strongly encourages minority candidates and women to apply. The University of the District of Columbia is an Economic Powerhouse in the District of Columbia. UDC is the only public university in the District of Columbia.

It is the only public university in the District of Columbia.
**Professional Opportunities**

**University of Georgia Department of Computer Science**

The Department of Computer Science at the University of Georgia invites applications for the position of Lecturer, starting August 2011. The primary responsibilities of this position are to teach foundational courses in the undergraduate major and to provide leadership and coordination in the areas of undergraduate recruitment, retention, and placement. It is intended that the position will periodically teach a senior/beginning graduate level course in his/her specialty. Successful candidates should hold the Ph.D. degree in Computer Science or a closely related field. Scholarly credentials should reflect a strong commitment to teaching at the undergraduate level. Although not tenure-track, it is expected that the person holding this position will remain with the department long term.

In the form of a single PDF file, please send an application letter, curriculum vitae, and a statement of teaching philosophy to cmnsls@cs.uga.edu. Under separate cover, applicants should also arrange for at least three letters of reference to be sent either via email or ordinary mail at the address below.

Applications received by January 15, 2011, will receive full consideration. For more information about the department and the university, please visit http://www.cs.uga.edu.

**Lecturer Search Committee**
Department of Computer Science
415 Red Clay Studies Research Building
University of Georgia
Athens, GA 30602
The Franklin College of Arts and Sciences, its many units, and the University of Georgia are committed to increasing the diversity of its faculty and students, and to sustaining a working and learning environment that is inclusive. The University is an EEO/AA institution.

---

**University of Houston**

**Computer Science Department**

The Computer Science Department seeks applicants for a tenure-track assistant or associate professor position commencing August 2011.

This position is in support of a new interdisciplinary cluster hire initiative, to study the aging mind and brain. Founders with expertise in biology, computer science, human systems integration, neuromarketing, neuropsychology, cognitive science, psychology, neuroscience, cognitive computer interaction, ambient computing, social network analysis or other areas at the intersection of these fields, are sought.

Candidates must hold a Ph.D. in computer science, informatics, or a closely related discipline. The successful candidate will be made within the Computer Science Department, which offers BS, BA, M.S., Computer Science/Healthcare Informatics, and M.S. in Information and Knowledge Science/Health Informatics programs.

Successful applicants must demonstrate potential for research and teaching excellence in the environment of a major research university. Applicants are encouraged to apply to the following areas: software design/engineering, computer security, human-computer interaction, and artificial intelligence. However, outstanding candidates in other areas will also be considered. Preference will be given to candidates with Ph.D. level but exceptional senior candidates 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 the areas of (i) high-performance computing, networks, real-time systems, security, (ii) Data Analysis (information retrieval, data mining, machine learning) and Computational Life Sciences (biomedical image analysis, bioinformatics, biostatistics, genomics).

The Department's research is the epitome of innovation, mining advances in core computer science areas with seamless multidisciplinary programs in computational medicine, biology, and psychology. The combination of fundamental research and innovations has led to numerous local, national and international collaborations, the majority of which are with the Texas Medical Center.

The University of Houston, one of the largest research universities in the nation with over 40,000 students, is located in one of the most vibrant metropolitan areas. Houston, the 4th largest U.S. city, is the epicenter of the energy industry, features the largest medical center in the world, and hosts the Johnson Space Center. The Department's research laboratories have joint programs with laboratories from the local medical schools and hospitals, NASA, and the high-tech 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 five. For full consideration all application material must be submitted by January 31, 2011. More information and instructions are available online at: http://www.cuh.edu/faculty-search.

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

**The University of Iowa Department of Computer Science**

**Dean, College of Computer, Mathematical, and Natural Sciences**

The University of Maryland, College Park invites applications and nominations for the position of Dean of the newly formed College of Computer, Mathematical, and Natural Sciences (www.cmns.umd.edu). A member of the Association of American Universities (AAU) and the Flagship of the University System of Maryland, the University is located in the Baltimore/Washington corridor within nine miles of the nation’s capital. The University ranks among the top 20 public universities with nationally-ranked programs and innovative undergraduate programs.

The search for new knowledge, with its transformative effect on society, is increasingly becoming an interdisciplinary endeavor. For this reason, the University established the College of Computer, Mathematical, and Natural Sciences (CMNS) by integrating the former colleges of Chemical and Life Sciences (CLLS) and Computer, Mathematical, and Physical Sciences (CMPS). This integration will facilitate and encourage the rapid development of collaboration from faculty across the two former colleges. This newly-formed College includes the following Departments: Astronomy, Atmospheric and Oceanic Sciences, Biology, Cell Biology and Molecular Genetics, Chemistry and Biochemistry, Computer Science, Entomology, Geography, Mathematics, and Physics. CMNS also has a number of prestigious research Institutes and Centers that are highly interdisciplinary. Nationally recognized for education and research, many programs in CMNS are ranked among the top ten of US public research universities. The College offers every student a high quality, innovative and cross-disciplinary educational experience, and a degree that commands respect around the world.

The Dean reports to the Senior Vice President for Academic Affairs and Provost, and is the chief academic officer and executive officer of the College, which has a full-time tenured/tenure-track faculty of 340 who are internationally recognized and highly accomplished scholars. The College also employs more than 400 non-tenure-track faculty and postdoctoral scholars. The College has over 5,000 undergraduate students and over 1,300 master and doctoral students. In addition, the College has received an average of over $200M annually for research.

We seek a leader who, in collaboration with the College chairs and directors, will play a major role in fostering continuous growth of our scientific accomplishments, and international prestige of the faculty and students in the College. The Dean will lead the College in building the strong partnerships that exist between the College and nearby federal agencies and laboratories, as well as fostering engagement with other regional, national, and international organizations. The Dean is expected to provide dynamic leadership toward achieving excellence in research, teaching, and service to the community and profession with a commitment to gender and ethnic diversity, and affirmative action to enhance the College’s integrative and intellectual mission. The Dean must demonstrate an understanding of contemporary issues in computer, mathematical, and natural sciences research and education, and must possess the ability to anticipate and address future challenges and opportunities. Qualified applicants must merit appointment at the rank of Professor with tenure in a CMNS unit, and have successful administrative experience. Individuals with substantial endowed and continuing major gifts and an ability to raise significant funds are encouraged to apply.

Applications and nominations should be submitted as a letter of interest, curriculum vitae, and the names and contact information of at least four persons who can be contacted by the search committee for reference. Nominations are encouraged and received at any time. Confidential review of nominations and applications for this position can be arranged by contacting the search committee for further discussion and information. The appointment date is open, with a start date of July 1, 2011.

Applications and nominations should be submitted to: search@cs.umd.edu. Electronic applications should be mailed to search@cs.umd.edu, followed by hard copies mailed to the above address.

The University of Maryland, College Park is an Equal Opportunity/Affirmative Action Employer. Women and minority candidates are encouraged to apply.
Multiple Faculty Positions at Charlotte

The University of North Carolina at Charlotte invites nominations and applications for two tenure-track faculty positions at all levels, with strong preference given to full and associate professor ranks. A successful candidate must have an excellent research record that can attract substantial research funding. The department is particularly interested in faculty with research expertise in health informatics, information and network security, and simulation of complex systems.

Successful applicants to the Bioinformatics and Genomics invites applications for the Carol Grotnes Belk Distinguished Professor of Bioinformatics and Genomics with tenure. Salaries for the above positions will be highly competitive, and successful candidates must have a Ph.D. degree in relevant area. For application details, please visit (http://jobs.uncc.edu) and click on faculty. Review of applications will start in September 2010 and continue until positions are filled. The University of North Carolina at Charlotte is an EEO/AA employer and an NSF Advance Institution.

University of North Texas

Department of Computer Science and Engineering

Applications are invited for the Chair position in the Department of Computer Science and Engineering at the University of North Texas. UNT is one of seven universities designated by the state as a "Emerging Research University." Candidates must have an earned doctorate in Computer Science and Engineering or a closely related field with a record of significant and sustained research funding and scholarly output that qualify them for the rank of full professor. Preferred: Administrative experience as a department chair or director of personnel working in computer science and engineering experience in curriculum development; and demonstrated experience mentoring junior faculty. The committee will begin its review of the applications on December 1, 2010, and the position may be filled by April 1, 2011. All applicants must apply online to: http://facultyjobs.unt.edu. Nominations and inquiries may be directed to Dr. Bill Buckles (bbuckles@unt.edu). Additional information about the department is available at www.cse.unt.edu. UNT is an AA/ADA/EOE.

University of Pennsylvania

Department of Computer and Information Science

The University of Pennsylvania’s Department of Computer and Information Science invites applications for two Lecturer positions. The department seeks individuals with exceptional promise for, or a proven record of, excellence in teaching undergraduate courses. Candidates should hold a Ph.D. in Computer Science or Computer Engineering, and have a strong interest in teaching with practical application. Duties for the Lecturer position include introductory programming courses for majors and non-majors, and other courses within the Computer Science program. The position is a nine-month appointment and applications may be submitted by February 15, 2011.

The University of Pennsylvania values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, sex, sexual orientation, gender identity, religion, color, national or ethnic origin, age, physical or mental disability, veteran status, or sexual assault survivor status. The University’s non-discrimination statement can be found at the website http://www.ctrp.upenn.edu. We are an Affirmative Action/Equal Opportunity employer and an NSF Advance Institution.

University of Texas at Austin

Computing Research News

January 2011

Professional Opportunities

University of Mississippi

(Ole Miss) Computing Research News

Chair

The Department of Computer and Information Science at the University of Mississippi (Ole Miss) invites applications for the position of Chair. The Chair provides leadership in academic and overall strategic direction for the instructional and research programs. Requirements include a Ph.D. or equivalent in computer science or a closely related field, evidence of excellence in teaching and research in one or more of the areas of computer science, information science, and administrative experience relevant to the management of an academic computer science department. The Department has an ABET/CAC-accredited undergraduate program and MS and PhD programs. See the website (http://www.cs.olemiss.edu) for more information about the Department and its programs. The University is located in the historic town of Oxford in the wooded hills of north Mississippi, an hour drive from Memphis. Oxford has a wonderful small-town atmosphere with affordable housing and excellent schools. Individuals should apply online at http://jobs.olemiss.edu. Applicants will be asked to upload a cover letter, curriculum vitae, statement of research and teaching plans with emphasis on research, and three letters of recommendation. Review of applications will begin immediately and will continue until the position is filled or an adequate applicant pool is reached. The University of Mississippi is an EEO/AA, Title VI, Title IX/Section 504/ ADA/ADEA Employer.

University of Virginia

Lecturer Positions

Applications are encouraged to apply as soon as possible for one open-rank, tenure-track or tenured faculty position in the department of Computer Science (http://www.cs.virginia.edu) starting August 2011. Applicants must possess a Ph.D. in Computer Science or in a closely related field with strong research and teaching experience in an area related to high performance computing, data visualization, and graphics. Applications must have a proven record of or a strong potential for interdisciplinary collaboration with others in the arts or sciences outside of Computer Science. At least three years of postdoctoral experience is required. The successful candidate will have the opportunity to serve as the Program Director of Visualization in the University of Miami Center for Computational Science (http://www.ccs.miami.edu) starting Fall 2010. Candidates should provide evidence of significant and sustained research funding and be experienced in building and managing large-scale, interdisciplinary research and educational efforts. The position is a nine month appointment, renewable annually up to three years, and is filled with a term of at least three years. The starting date is flexible.

The University of Virginia is an Equal Opportunity/Affirmative Action Employer which is committed to diversity in the workplace and encourages applications from women, minorities, veterans and individuals with disabilities.

University of Wisconsin-Madison

Lecturer positions are for one year, renewable, and are available beginning 2011-2012, in the Department of Computer Science. Applications will be accepted until the position is filled. The University of Wisconsin-Madison is an AA/ADA/EOE employer.

University of Wisconsin-Milwaukee

Assistant/Associate Chair

The University of Wisconsin-Milwaukee is an Equal Opportunity/Affirmative Action employer.

University of Wisconsin-Madison

Assistant Professor

Applications will be accepted until the position is filled. The University of Wisconsin-Madison is an AA/ADA/EOE employer.

University of Wisconsin-Madison

Professorship of Bioinformatics and Genomics

Applications are encouraged to apply as soon as possible for one open-rank, tenure-track or tenured faculty position in the Department of Computer Science at the University of Wisconsin-Madison. The successful candidate will have a strong research record in an area related to high performance computing, data visualization, and graphics. Applications must have a proven record of or a strong potential for interdisciplinary collaboration with others in the arts or sciences outside of Computer Science. At least three years of postdoctoral experience is required. The successful candidate will have the opportunity to serve as the Program Director of Visualization in the University of Miami Center for Computational Science (http://www.ccs.miami.edu) starting Fall 2010. Candidates should provide evidence of significant and sustained research funding and be experienced in building and managing large-scale, interdisciplinary research and educational efforts. The position is a nine month appointment, renewable annually up to three years, and is filled with a term of at least three years. The starting date is flexible.

The University of Virginia is an Equal Opportunity/Affirmative Action Employer which is committed to diversity in the workplace and encourages applications from women, minorities, veterans and individuals with disabilities.

University of Wisconsin-Madison

Lecturer positions are for one year, renewable, and are available beginning 2011-2012, in the Department of Computer Science. Applications will be accepted until the position is filled. The University of Wisconsin-Madison is an AA/ADA/EOE employer.

University of Wisconsin-Madison

Assistant Professor

Applications will be accepted until the position is filled. The University of Wisconsin-Madison is an AA/ADA/EOE employer.

University of Wisconsin-Madison

Professorship of Bioinformatics and Genomics

Applications are encouraged to apply as soon as possible for one open-rank, tenure-track or tenured faculty position in the Department of Computer Science at the University of Wisconsin-Madison. The successful candidate will have a strong research record in an area related to high performance computing, data visualization, and graphics. Applications must have a proven record of or a strong potential for interdisciplinary collaboration with others in the arts or sciences outside of Computer Science. At least three years of postdoctoral experience is required. The successful candidate will have the opportunity to serve as the Program Director of Visualization in the University of Miami Center for Computational Science (http://www.ccs.miami.edu) starting Fall 2010. Candidates should provide evidence of significant and sustained research funding and be experienced in building and managing large-scale, interdisciplinary research and educational efforts. The position is a nine month appointment, renewable annually up to three years, and is filled with a term of at least three years. The starting date is flexible.

The University of Virginia is an Equal Opportunity/Affirmative Action Employer which is committed to diversity in the workplace and encourages applications from women, minorities, veterans and individuals with disabilities.

University of Wisconsin-Madison

Lecturer positions are for one year, renewable, and are available beginning 2011-2012, in the Department of Computer Science. Applications will be accepted until the position is filled. The University of Wisconsin-Madison is an AA/ADA/EOE employer.

University of Wisconsin-Madison

Assistant Professor

Applications will be accepted until the position is filled. The University of Wisconsin-Madison is an AA/ADA/EOE employer.
Professional Opportunities

gust. The project involves work on face detection, object tracking, and emotion detection and analysis with application to neuropsychiatric disorders. SRA is a group of engineering professionals working in active collaboration with doctors.

For details please contact, Ragini Verma, Paul A. Volcker Professor of Engineering, University of Pennsylvania at Ragini.Volcker@upenn.edu.

University of Rochester
Computer Science Department
3120 East River Road, Rochester, New York 14623-0222

The UR Department of Computer Science seeks researchers in computer vision and/or machine learning for a tenure-track faculty position beginning in Fall 2011. Outstanding candidates in other areas may also be considered. Candidates must have a Ph.D. in computer science or related discipline. Senior candidates should have an extraordinary record of scholarship, leadership, and service.

The Department of Computer Science is a select research-oriented department, with a supportive, collegial environment and strong ties to cognitive science, linguistics, and electrical and computer engineering. Over the past decade, a third of its Ph.D. graduates have won tenure-track faculty positions, and its alumni include leaders at major research laboratories such as Google, Microsoft, and IBM.

The University of Rochester is a private, Tier I research institution located in western New York State. The University of Rochester consistently ranks among the top institutions, both national and private, in federal funding for research and development. Half of its undergraduates go on to graduate studies in a university education. The university includes the Eastman School of Music, a premier musical institution, and the University of Rochester Medical Center, a major medical school, research center, and hospital system. The Rochester area features a wealth of cultural and recreational opportunities, excellent public and private schools, and a low cost of living.

Candidates should apply online at http://www.rochester.edu/recruit after November 1, 2010. Review of applications will begin on December 1, and continue until all interview openings are filled.

The University of Rochester has a strong commitment to diversity and actively encourages applications from candidates from underrepresented minority groups.

The Computer Science Department and the College of Arts and Sciences of the University of Rochester are Equal Opportunity/Affirmative Action employers.

University of South Carolina
College of Engineering, Computing and Applied Science
201 Stone Hall, Columbia, SC 29208

The University of South Carolina is an Equal Opportunity/Affirmative Action employer. Women, racial/ethnic minorities and persons with disabilities are encouraged to apply.

The University of South Carolina (USC) seeks applications from candidates from groups underrepresented in higher education.

The University of South Carolina is an Equal Opportunity/Affirmative Action employer. Women, racial/ethnic minorities and persons with disabilities are encouraged to apply.

The University of Texas at El Paso
Computer Science Department
Tower 1.208
El Paso, TX 806-834-1067

The University of Texas at El Paso (UTEP) is seeking applicants for a faculty position to support the growth of the CyberInfrastructure and Advanced Research Computing Center (CyberShARE). For information about this position including required qualifications and application instructions, please visit the Faculty Opportunities website.

University of Texas at El Paso
Computer Science Department
3100 East University Avenue
El Paso, TX 79968

We offer an ABET-accredited bachelor’s degree in computer science as well as emphasis in software engineering and computer engineering, and currently have approximately 200 students pursuing a bachelor’s degree.

For more information, go to: https://www.utep.edu/ComputerScience/

University of Wisconsin-Madison
Faculty Positions in Computational Science

The University of Wisconsin-Madison is seeking applicants for faculty positions in the Computational Science and Engineering program. These positions will be part of the Systems Biology Theme of the recently founded Wisconsin Institute for Discovery (WID) and the Morgridge Institute for Research are for tenure-track assistant professor or higher. The successful candidate will establish and maintain an externally-funded research program, a strong commitment to undergraduate and graduate education, and excellent communication skills. Startup funds are available along with a shared support position, dedicated space, and core facility. Salary is competitive and commensurate with qualifications and experience.

Interested persons should submit a letter of application, a resume, 3 of your best publications, and research proposals to Michael Murphy, Director, CyberShARE Center's STEM-centered Cyberinfrastructure program. For more details about this position, please visit http://www.cs.wisc.edu/cybershare/cyberinfrastructure.

Women, racial/ethnic minorities and persons with disabilities are encouraged to apply. Applications will be accepted until the position is filled.

NOTE: UTPA is an Equal Opportunity/Affirmative Action employer.

University of Wisconsin-Madison
Faculty Positions in Computational Science

The University of Wisconsin-Madison is seeking applicants for faculty positions in the Computational Science and Engineering program. These positions will be part of the Systems Biology Theme of the recently founded Wisconsin Institute for Discovery (WID) and the Morgridge Institute for Research are for tenure-track assistant professor or higher. The successful candidate will establish and maintain an externally-funded research program, a strong commitment to undergraduate and graduate education, and excellent communication skills. Startup funds are available along with a shared support position, dedicated space, and core facility. Salary is competitive and commensurate with qualifications and experience.

Interested persons should submit a letter of application, a resume, 3 of your best publications, and research proposals to Michael Murphy, Director, CyberShARE Center's STEM-centered Cyberinfrastructure program. For more details about this position, please visit http://www.cs.wisc.edu/cybershare/cyberinfrastructure.

Women, racial/ethnic minorities and persons with disabilities are encouraged to apply. Applications will be accepted until the position is filled.

NOTE: UTPA is an Equal Opportunity/Affirmative Action employer.

University of Wisconsin-Madison
Faculty Positions in Computational Science

The University of Wisconsin-Madison is seeking applicants for faculty positions in the Computational Science and Engineering program. These positions will be part of the Systems Biology Theme of the recently founded Wisconsin Institute for Discovery (WID) and the Morgridge Institute for Research are for tenure-track assistant professor or higher. The successful candidate will establish and maintain an externally-funded research program, a strong commitment to undergraduate and graduate education, and excellent communication skills. Startup funds are available along with a shared support position, dedicated space, and core facility. Salary is competitive and commensurate with qualifications and experience.

Interested persons should submit a letter of application, a resume, 3 of your best publications, and research proposals to Michael Murphy, Director, CyberShARE Center's STEM-centered Cyberinfrastructure program. For more details about this position, please visit http://www.cs.wisc.edu/cybershare/cyberinfrastructure.

Women, racial/ethnic minorities and persons with disabilities are encouraged to apply. Applications will be accepted until the position is filled.

NOTE: UTPA is an Equal Opportunity/Affirmative Action employer.

University of Wisconsin-Madison
Faculty Positions in Computational Science

The University of Wisconsin-Madison is seeking applicants for faculty positions in the Computational Science and Engineering program. These positions will be part of the Systems Biology Theme of the recently founded Wisconsin Institute for Discovery (WID) and the Morgridge Institute for Research are for tenure-track assistant professor or higher. The successful candidate will establish and maintain an externally-funded research program, a strong commitment to undergraduate and graduate education, and excellent communication skills. Startup funds are available along with a shared support position, dedicated space, and core facility. Salary is competitive and commensurate with qualifications and experience.

Interested persons should submit a letter of application, a resume, 3 of your best publications, and research proposals to Michael Murphy, Director, CyberShARE Center's STEM-centered Cyberinfrastructure program. For more details about this position, please visit http://www.cs.wisc.edu/cybershare/cyberinfrastructure.

Women, racial/ethnic minorities and persons with disabilities are encouraged to apply. Applications will be accepted until the position is filled.

NOTE: UTPA is an Equal Opportunity/Affirmative Action employer.

University of Wisconsin-Madison
Faculty Positions in Computational Science

The University of Wisconsin-Madison is seeking applicants for faculty positions in the Computational Science and Engineering program. These positions will be part of the Systems Biology Theme of the recently founded Wisconsin Institute for Discovery (WID) and the Morgridge Institute for Research are for tenure-track assistant professor or higher. The successful candidate will establish and maintain an externally-funded research program, a strong commitment to undergraduate and graduate education, and excellent communication skills. Startup funds are available along with a shared support position, dedicated space, and core facility. Salary is competitive and commensurate with qualifications and experience.

Interested persons should submit a letter of application, a resume, 3 of your best publications, and research proposals to Michael Murphy, Director, CyberShARE Center's STEM-centered Cyberinfrastructure program. For more details about this position, please visit http://www.cs.wisc.edu/cybershare/cyberinfrastructure.

Women, racial/ethnic minorities and persons with disabilities are encouraged to apply. Applications will be accepted until the position is filled.

NOTE: UTPA is an Equal Opportunity/Affirmative Action employer.
methodology for addressing problems in computer science. The Mission of the Systems Biology Theme is to advance the frontiers of knowledge by integrating systems biology research and education at the interfaces of quantitative, computational and biological sciences.

For full consideration, applicants should submit their application by 1 March 2011. Applications should be submitted to the following web-site: http://newfac.sysbio.discovery.wisc.edu

Doctorate in computer science or a closely related field, with priority in the areas of:

- Theoretical computer science
- Computational biology
- Parallel computing
- Data mining
- Cloud computing
- Human-computer interaction

Salary for suitably qualified applicants is competitive and commensurate with experience. Virginia Tech is an Equal Opportunity/Affirmative Action Institution.

Applications must be submitted online to https://jobs.vt.edu for posting #0100318. Applicant screening will begin December 15, 2010 and continue until the position is filled. Inquiries should be directed to Chris North, Hiring Committee Chair, north@cs.vt.edu.

Virginia Tech
Department of Computer Science
Cybersecurity Senior Position

The Department of Computer Science (CS@VT) at Virginia Tech seeks applicants for a tenure-track faculty position in the area of cybersecurity, at Associate Professor or Professor rank, located on the campus of Virginia Tech in the National Capital Region (NCR, www.nvrc.net). The successful candidate will contribute to the research and graduate programs in the NCR and collaborate with faculty at Virginia Tech’s campus in Blacksburg, VA. This position is part of a cluster hire of a total of five positions on both campuses in computer systems, cybersecurity and trusted systems. Preference will be given to candidates with the Department of the Computer Science and the Bradley Department of Electrical and Computer Engineering (ECE) at Virginia Tech.

Candidates should have research interests in information security, cyber-physical systems, trusted systems, and other topics relevant to national security and national critical infrastructure. Ideal candidates combine cybersecurity with existing department strengths in software engineering, performance computing, networks and systems, data mining, and human-computer interaction. Candidates should have a record appropriate to a tenured position in scholarship, leadership, and interdisciplinary collaboration in cybersecurity; demonstrated ability to contribute to teaching at the graduate level in cybersecurity and related subjects; sensitivity to issues of diversity in the campus community; established professional/technical experience in working with cybersecurity-related government agencies and industry, potentially including proprietary research, and the skills needed to establish and grow a geographically distributed research group. Salary for suitably qualified applicants is competitive and commensurate with experience. Virginia Tech is an Equal Opportunity/Affirmative Action Institution.

Applications must be submitted online to https://jobs.vt.edu for posting #0100318. Applicant screening will begin December 15, 2010 and continue until the position is filled. Inquiries should be directed to Chris North, Hiring Committee Chair, north@cs.vt.edu.

Virginia Tech
Department of Computer Science
Machine Learning/Artificial Intelligence

The Department of Computer Science at Virginia Tech invites applications from candidates in artificial intelligence with particular interests in machine learning, artificial neural networks, and other topics relevant to the area of research and teaching achievement and publication, a coherent research and teaching plan showing the potential for research funding, a track record in teaching, a Ph.D. in Computer Science, and the Bradley Department of Electrical and Computer Engineering (ECE).

The successful candidate will join the department as a Professor with tenure-track rank. The position is part of a cluster hire of a total of five positions on both campuses in computer systems, cybersecurity and trusted systems. Preference will be given to candidates with the Department of the Computer Science and the Bradley Department of Electrical and Computer Engineering (ECE). The successful candidate will have a Ph.D. in Computer Science or a closely related field, and the organizational skills needed to establish and grow a geographically distributed research group. Salary for suitably qualified applicants is competitive and commensurate with experience. Virginia Tech is an Equal Opportunity/Affirmative Action Institution.

Applications must be submitted online to https://jobs.vt.edu for posting #0100774. Applicant screening will begin December 15, 2010 and continue until the position is filled. Inquiries should be directed to Godmar Back, Hiring Committee Chair, godmar@cs.vt.edu.

York College of Pennsylvania
Department of Computer Science
Tenure Track Faculty Computer Science/ Computer Engineering

York College of Pennsylvania invites applications for a tenure-track position beginning in August 2011 to teach courses in both Computer and Computer Engineering. Applicants must have a Ph.D. in either Computer Engineering, Computer Science and Engineering, Computer Science or in a closely related field and have a commitment to excellence in undergraduate teaching.

Interests in teaching a broad range of computer science and computer engineering courses are encouraged, including but not limited to one or more of the following: real-time embedded systems, operating systems, and network security. Candidates are expected to demonstrate the potential for outstanding teaching/mentoring, college service, and research/development under significant undergraduate laboratories, and work with industry and students in applied research. Preference will be given to candidates who have industrial work experience.

Applications must be submitted online to https://jobs.vt.edu for posting #0100838. Applicant screening will begin January 15, 2011. Information on the ECE program and the college can be found at http://cs.ycp.edu/

Equal Opportunity/Affirmative Action employer, committed to excellence in teaching, scholarship, and diversity in its faculty, staff, and student body. York College of Pennsylvania encourages applications from diverse candidates.

York College of Pennsylvania
Department of Computer Science
Tenure-Track Faculty Computer Science/ Computer Engineering

York College of Pennsylvania invites applications for a tenure-track position beginning in August 2011 to teach courses in both Computer and Computer Engineering. Applicants must have a Ph.D. in Computer Science and Engineering, Computer Science or in a closely related field and have a commitment to excellence in undergraduate teaching.

Interests in teaching a broad range of computer science and computer engineering courses are encouraged, including but not limited to one or more of the following: real-time embedded systems, operating systems, and network security. Candidates are expected to demonstrate the potential for outstanding teaching/mentoring, college service, and research/development under undergraduate laboratories, and work with industry and students in applied research. Preference will be given to candidates who have industrial work experience.

Applications must be submitted online to https://jobs.vt.edu for posting #0100838. Applicant screening will begin January 15, 2011. Information on the ECE program and the college can be found at http://cs.ycp.edu/

Equal Opportunity/Affirmative Action employer, committed to excellence in teaching, scholarship, and diversity in its faculty, staff, and student body. York College of Pennsylvania encourages applications from diverse candidates.

York College of Pennsylvania
Department of Computer Science
Tenure-Track Faculty Computer Science/ Computer Engineering

York College of Pennsylvania invites applications for a tenure-track position beginning in August 2011 to teach courses in both Computer and Computer Engineering. Applicants must have a Ph.D. in Computer Science and Engineering, Computer Science or in a closely related field and have a commitment to excellence in undergraduate teaching.

Interests in teaching a broad range of computer science and computer engineering courses are encouraged, including but not limited to one or more of the following: real-time embedded systems, operating systems, and network security. Candidates are expected to demonstrate the potential for outstanding teaching/mentoring, college service, and research/development under undergraduate laboratories, and work with industry and students in applied research. Preference will be given to candidates who have industrial work experience.

Applications must be submitted online to https://jobs.vt.edu for posting #0100838. Applicant screening will begin January 15, 2011. Information on the ECE program and the college can be found at http://cs.ycp.edu/

Equal Opportunity/Affirmative Action employer, committed to excellence in teaching, scholarship, and diversity in its faculty, staff, and student body. York College of Pennsylvania encourages applications from diverse candidates.

York College of Pennsylvania
Department of Computer Science
Tenure-Track Faculty Computer Science/ Computer Engineering

York College of Pennsylvania invites applications for a tenure-track position beginning in August 2011 to teach courses in both Computer and Computer Engineering. Applicants must have a Ph.D. in Computer Science and Engineering, Computer Science or in a closely related field and have a commitment to excellence in undergraduate teaching.

Interests in teaching a broad range of computer science and computer engineering courses are encouraged, including but not limited to one or more of the following: real-time embedded systems, operating systems, and network security. Candidates are expected to demonstrate the potential for outstanding teaching/mentoring, college service, and research/development under undergraduate laboratories, and work with industry and students in applied research. Preference will be given to candidates who have industrial work experience.

Applications must be submitted online to https://jobs.vt.edu for posting #0100838. Applicant screening will begin January 15, 2011. Information on the ECE program and the college can be found at http://cs.ycp.edu/

Equal Opportunity/Affirmative Action employer, committed to excellence in teaching, scholarship, and diversity in its faculty, staff, and student body. York College of Pennsylvania encourages applications from diverse candidates.

York College of Pennsylvania
Department of Computer Science
Tenure-Track Faculty Computer Science/ Computer Engineering

York College of Pennsylvania invites applications for a tenure-track position beginning in August 2011 to teach courses in both Computer and Computer Engineering. Applicants must have a Ph.D. in Computer Science and Engineering, Computer Science or in a closely related field and have a commitment to excellence in undergraduate teaching.

Interests in teaching a broad range of computer science and computer engineering courses are encouraged, including but not limited to one or more of the following: real-time embedded systems, operating systems, and network security. Candidates are expected to demonstrate the potential for outstanding teaching/mentoring, college service, and research/development under undergraduate laboratories, and work with industry and students in applied research. Preference will be given to candidates who have industrial work experience.

Applications must be submitted online to https://jobs.vt.edu for posting #0100838. Applicant screening will begin January 15, 2011. Information on the ECE program and the college can be found at http://cs.ycp.edu/

Equal Opportunity/Affirmative Action employer, committed to excellence in teaching, scholarship, and diversity in its faculty, staff, and student body. York College of Pennsylvania encourages applications from diverse candidates.

York College of Pennsylvania
Department of Computer Science
Tenure-Track Faculty Computer Science/ Computer Engineering

York College of Pennsylvania invites applications for a tenure-track position beginning in August 2011 to teach courses in both Computer and Computer Engineering. Applicants must have a Ph.D. in Computer Science and Engineering, Computer Science or in a closely related field and have a commitment to excellence in undergraduate teaching.

Interests in teaching a broad range of computer science and computer engineering courses are encouraged, including but not limited to one or more of the following: real-time embedded systems, operating systems, and network security. Candidates are expected to demonstrate the potential for outstanding teaching/mentoring, college service, and research/development under undergraduate laboratories, and work with industry and students in applied research. Preference will be given to candidates who have industrial work experience.

Applications must be submitted online to https://jobs.vt.edu for posting #0100838. Applicant screening will begin January 15, 2011. Information on the ECE program and the college can be found at http://cs.ycp.edu/

Equal Opportunity/Affirmative Action employer, committed to excellence in teaching, scholarship, and diversity in its faculty, staff, and student body. York College of Pennsylvania encourages applications from diverse candidates.