

Computing Research News

COMPUTING RESEARCH ASSOCIATION, CELEBRATING 40 YEARS OF SERVICE TO THE COMPUTING RESEARCH COMMUNITY

MARCH 2014

Vol. 26 / No. 3

Announcements

| | |
|--|-----------|
| Congressional Visits Day | 2 |
| Jouppi Elected to NAS | 2 |
| CRA and CCC Bid Farewell to Kenneth Hines | 2 |
| 2014 CRA Conference at Snowbird | 3 |
| 2014 CRA Career Mentoring Workshop | 3 |
| Computer Science for Non-Majors | 4 |
| 2014 Tapia Conference Breaks Attendance Records | 5 |
| CERP Infographic | 8 |
| 2014 Distinguished Service and Habermann Awardees | 9 |
| Collaborative Research Experiences for Undergraduates | 9 |
| Taulbee Preview | 10 |
| CRA Board Members | 11 |
| CRA Board Officers | 11 |
| CRA Staff | 11 |
| Professional Opportunities | 12 |

Announcements

Congressional Visits Day



Immediately following the February Board meeting, several board members and the CDC Chair spent the day meeting with congressional offices..

Jouppi Elected to NAS



Congrats to former CRA Board member Norm Jouppi for being elected to the National Academy of Engineering. He was selected “for contributions to the design of computer memory hierarchies.”

CRA and CCC Bid Farewell to Kenneth Hines



After serving almost four years at CRA, Kenneth Hines will be leaving CRA to return to a research career at Teaching Strategies in Bethesda, Maryland. When Kenneth joined CRA in 2010, he was primarily responsible for data analysis on undergraduate and graduate computing students through the “Data

Buddies” project with the Committee on the Status of Women in Computing Research (CRA-W). He also analyzed Ph.D. and postdoctoral data using a wide range of data sources, including NSF’s Survey of Doctorate Recipients (SDR) and CRA’s annual Taulbee survey.

In June 2012, Kenneth transitioned to a new position within CRA, a Program Associate for the Computing Community Consortium (CCC). In this position, he has been a frequent contributor to the CCC Blog, Research Highlight of the Week, Computing Research in Action and Computing Research News. CCC would like to commend Kenneth for providing strong leadership during September 2012 through March 2013. During that time, in the absence of a CCC Director, Kenneth worked closely with the CCC executive committee to help establish CCC directions and priorities, and organized several CCC visioning activities among many other responsibilities.

It’s been a pleasure to work with Kenneth over the years. While he will be missed at CRA and CCC, we wish him the best as he returns to a career in research and evaluation.



CONFERENCE AT SNOWBIRD

JULY 20 – 22, 2014
SNOWBIRD, UTAH

2014 CRA Conference at Snowbird

The event will be held July 20 – 22 in Snowbird, Utah.

Click [here](#) to view the updated program.

2014 CRA Career Mentoring Workshop

The 2014 CRA Career Mentoring Workshop was held February 24-25 in Washington, DC. The workshop provides career advice and mentoring activities for post docs, assistant professors, and individuals just starting as industrial researchers in computer science. In addition to panel sessions, the workshop was interspersed with opportunities to network with senior researchers and representatives from government agencies. This year featured a new session held at the National Science Foundation (NSF). After the first day, participants used their new knowledge to refine one-pagers on their research and later visited NSF to discuss their one-pagers with Program Directors from the Computer and Information Science and Engineering Directorate at NSF. Visit <http://www.cra.org/events/career-mentoring/> for more details.



Computer Science for Non-Majors

From the CCC Blog



The following is a special contribution to this blog by [Ran Libeskind-Hadas, R. Michael Shanahan Professor and Department Chair of Computer Science at \[Harvey Mudd College\]\(#\), currently on sabbatical at \[Massachusetts Institute of Technology\]\(#\) \(MIT\). Ran is a member of the \[Computing Community Consortium\]\(#\) \(CCC\) Council and Co-Chair of the](#)

Computing Research Association's [Education Committee](#) (CRA-E).

I'm on sabbatical this year and have been visiting computer science departments at colleges and universities, small and large. One of the recurring stories that I hear is that a growing number of non-majors are choosing to take introductory CS courses. And, some of these students get so excited that they choose to take a second CS course. Although this results in large courses and staffing headaches, it is generally viewed as a good "problem" to have.

I believe that this is an ideal moment to develop new computing courses and curricula for non-majors. This sounds crazy given that we're drowning in students and have little precious time to do much more than tread water. Here's my case.

College students across all fields are quickly recognizing two important facts: Every well educated citizen should understand something about the computationally-pervasive world in which we live. Second, computing skills are likely to be useful across virtually all disciplines including the arts, humanities, and social sciences.

Many of these students discover computing late in their college lives and/or have other constraints that prevent them from taking more than one or two computing courses. Those students, I believe, are not ideally served by traditional CS 1 and 2 courses which are often designed as the stepping stones of a computer science major. While implementing a queue as a doubly-linked list is probably important for a CS major (although one could reasonably argue that it still doesn't have to be presented in CS 1), it's almost certainly not the highest priority for a social scientist or a biologist.

What then should be taught in courses for non-majors? I don't believe that there's one right answer, but I do believe that some of the ingredients are the following:

- * Programming. Building interesting computational artifacts is incredibly exciting and compelling and helps demystify the otherwise magical software that a college student uses everyday.
- * Programming at a "high level of abstraction." Specifically, using a language with low syntactic overhead and with built-in abstract data types in order to concentrate on building interesting computational tools.
- * Demonstrating a breadth of applications. Depending on the design of the course, this breadth might be a range of applications across many fields of studies, just in one domain (e.g., sciences, social sciences, arts), or a specific discipline (e.g., biology).
- * Giving students the tools to write programs that they actually want to use. Here are two simple litmus tests: Will students spend at least as much time using their programs to explore something new as they did writing them (e.g., using a program to align biological sequence and make inferences from those alignments, building their own music recommender system, etc.)? And, does the assigned work offer creative avenues for students to invent and implement their own ideas (e.g., in the form of innovative features above-and-beyond the minimum requirements)?
- * Discussing big ideas such as efficiency and intractability or how computers work.

Many departments have recently started developing and offering courses in this spirit. Some examples include the "Data Programming" course at the University of Washington (<http://courses.cs.washington.edu/courses/cse140/>), "The Beauty and Joy of Computing" at Berkeley (<http://inst.eecs.berkeley.edu/~cs10/sp14/>), "Computer Science for All" at Harvey Mudd (<https://www.cs.hmc.edu/twiki/bin/view/CS5/WebHome>), among others.

It's hard to allocate resources to this endeavor, but it's an investment worth making, both for the well-being of society in general and to cultivate more computationally sophisticated future colleagues across all disciplines.

Expanding the Pipeline: 2014 Tapia Celebration of Diversity in Computing Conference Breaks Attendance Records

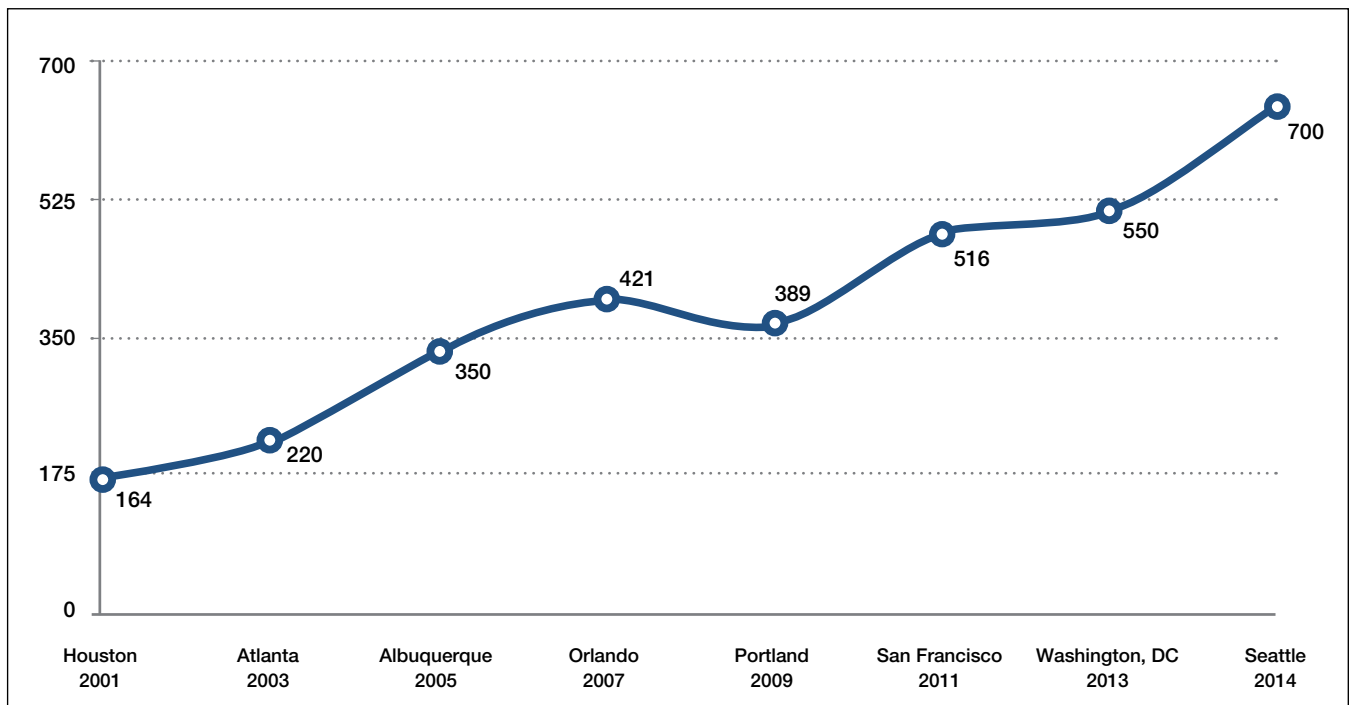
By Manuel Pérez-Quiñones, Jamika Burge, and Nancy Amato

The 2014 ACM Richard Tapia Celebration of Diversity in Computing Conference was held in Seattle, WA, February 5-8, 2014. The conference is the premier event for the Coalition to Diversity Computing (CDC) and presented by the National Center for Minorities and People with Disabilities in Information Technology (CMD-IT). The conference is now in its eighth year and it is now on a yearly cycle. The goal is to bring together a diverse group of technical leaders to lead discussions in the state-of-the art in computing and technology. The Tapia conference has a tradition of providing a supportive networking environment for under-represented groups of students and professionals, across the broad range of computing and information technology, from science to business to the arts to infrastructure.

For the third conference in a row, the Tapia Conference broke attendance records. We had 700 registered participants and closed registration early. As shown below, this continues a

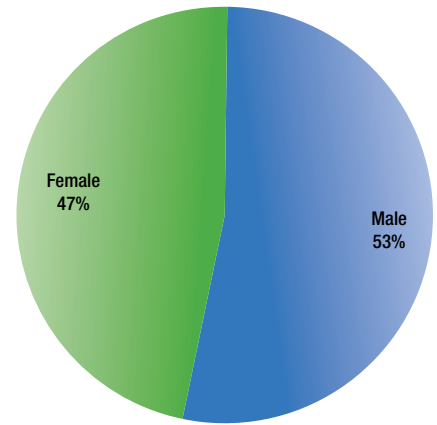
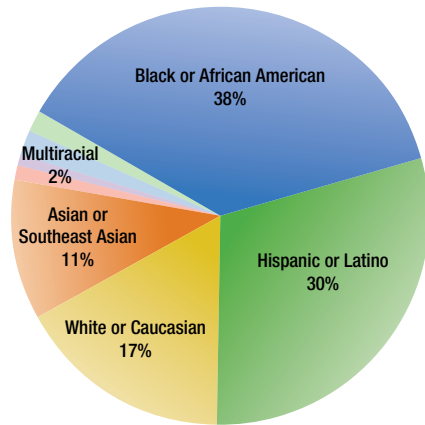
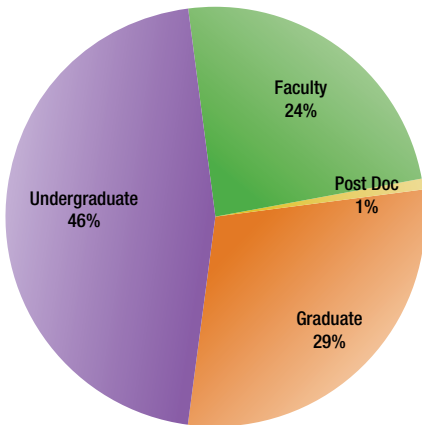
trend of steady growth for this conference and its attendees. We also had record numbers in applications for scholarships, company sponsors, and even undergraduate participation. Overall, it was a successful offering and part of a great trend for this group.

This conference is also quite possibly the most diverse conference in the ACM series. Making this year's conference theme, "Strength of Diversity," a reality, the conference had 47% female participation, 38% African-Americans, 30% Hispanics/Latinos, and 11% Asian/Southeast Asian. The strength of diversity at the conference was evidenced by the collegiality among these groups and the closeness of engagement and discussion that resulted. There was also a flurry of activity over social media (Twitter in particular, search for #Tapia2014) from the attendees at the conference, extending the reach and impact of this conference to other followers around the nation.





Participants at the conference enjoying a break with Richard Tapia, Dave Patterson, Armando Fox, Valerie Taylor and Dan Garcia.



This year's conference keynote speakers included Chieko Asakawa (Fellow, IBM Japan), Dan Garcia (University of California, Berkeley), Latanya Sweeny (Harvard University) and James McLurkin (Rice University). Kathryn McKinley (Microsoft) gave the Ken Kenney Distinguished Lecture and Marcus Mitchell (Google) was the banquet speaker. Jan Cuny

(NSF) was awarded the Richard Tapia Award in recognition for her career long efforts to make computing more inclusive. Overall, the list of speaker and other participants reflected the diversity of our community, with excellent representation of both men and women, African-Americans, Hispanics, and people with disabilities.



Richard Tapia with Jan Cunny, the recipient of the 2014 Tapia Award.

In addition, conference attendees participated in panel discussions, workshops, student-based research posters, birds-of-a-feather (BoF) sessions, a code-a-thon, doctoral consortium and even a high school teacher's workshop.

The 2014 conference counted with 47 supporters including our Platinum Supporters – NSF, TRUST, Microsoft, Georgia Tech, IAAMCS; our Gold supporters – Motorola Solutions Foundation, Google, XSEDE, Lawrence Livermore National Laboratory, the Department of Computer Science and Engineering at Texas A&M University, the Department of Computer Science at Virginia Tech, and the Department of Electrical Engineering and Computer Science at University of California at Berkeley; and many Silver and Bronze Supporters.

The Coalition to Diversify Computing (CDC) collaborated with The Computing Research Association Committee on Women in Computing (CRA-W) to provide professional development activities for Tapia Conference participants. The mentoring workshop was offered to undergraduate students, graduate students, and mid-career professionals to support the goals of the CDC and CRA-W, which include increasing the degree of success for women, people of color, and persons with disabilities who are pursuing careers in computing.

2014 marked the first year for the CRA-W/CDC workshops to be offered at Tapia. The workshop is designed to give student and professional conference attendee an opportunity to participate in hands-on training relating to career development. Speakers were professors, tech entrepreneurs, and research scientists representing industry, academia, and government, and participants were able to learn tips for how to be successful in computing at all levels. Speakers represented a host of organizations – more information about this year's dynamic program and speakers can be found be found at <http://goo.gl/dGatG5>.

This year's Conference General Chair was Annie Anton (Georgia Tech), and the Program Committee Chair was Manuel A. Pérez-Quiñones (Virginia Tech). The 2015 Tapia conference will be held in Boston, MA on February 18-21, 2015. The Conference General Chair is Charles Isbell (Georgia Tech) and the Program Committee Chair is Ron Metoyer (Oregon State University).

The Tapia conference is organized by the Coalition to Diversify Computing (CDC), sponsored by the Association for Computing Machinery (ACM), and presented by the Center for Minorities and People with Disabilities in Information Technology (CMD-IT). Join us next year in Boston!

About the Authors

Manuel A. Pérez-Quiñones is Associate Professor and Associate Department Head and Director for Graduate Studies in Computer Science at Virginia Tech. He received a BA and MS in Computer Science from Ball State University and a DSc from George Washington University. He worked at the Naval Research Lab and then joined academia with a position at the University of Puerto Rico-Mayaguez and has been at Virginia Tech since 2000. He currently co-chairs CDC.

Jamika D. Burge is a Senior Scientist at Information Systems Worldwide, a technology, engineering, and research company providing high-end advanced technical, integration, engineering, and analysis solutions to the US Government and other organizations, where she is currently serving as a technical consultant and subject matter expert (SME) for Defense Advanced Research Projects Agency (DARPA). She earned her PhD in computer science and applications from Virginia Polytechnic Institute & State University (Virginia Tech), where she was an IBM Research Fellow and won an IBM Research Dissertation Fellowship. She currently co-chairs the Coalition to Diversify Computing (CDC).

Nancy M. Amato is Unocal Professor and Interim Department Head of the Department of Computer Science and Engineering at Texas A&M University where she co-directs the Parasol Lab. She received undergraduate degrees in Mathematical Sciences and Economics from Stanford University, and M.S. and Ph.D. degrees in Computer Science from UC Berkeley and the University of Illinois at Urbana-Champaign, respectively. She was co-Chair of the National Center for Women in Information Technology (NCWIT) Academic Alliance, currently serves on the CRA-W, CRA-E, and CDC committees, and is a Fellow of the American Association for the Advancement of Science (AAAS), a Fellow of the Institute of Electrical and Electronics Engineers (IEEE), a Fellow of the World Technology Network (WTN).

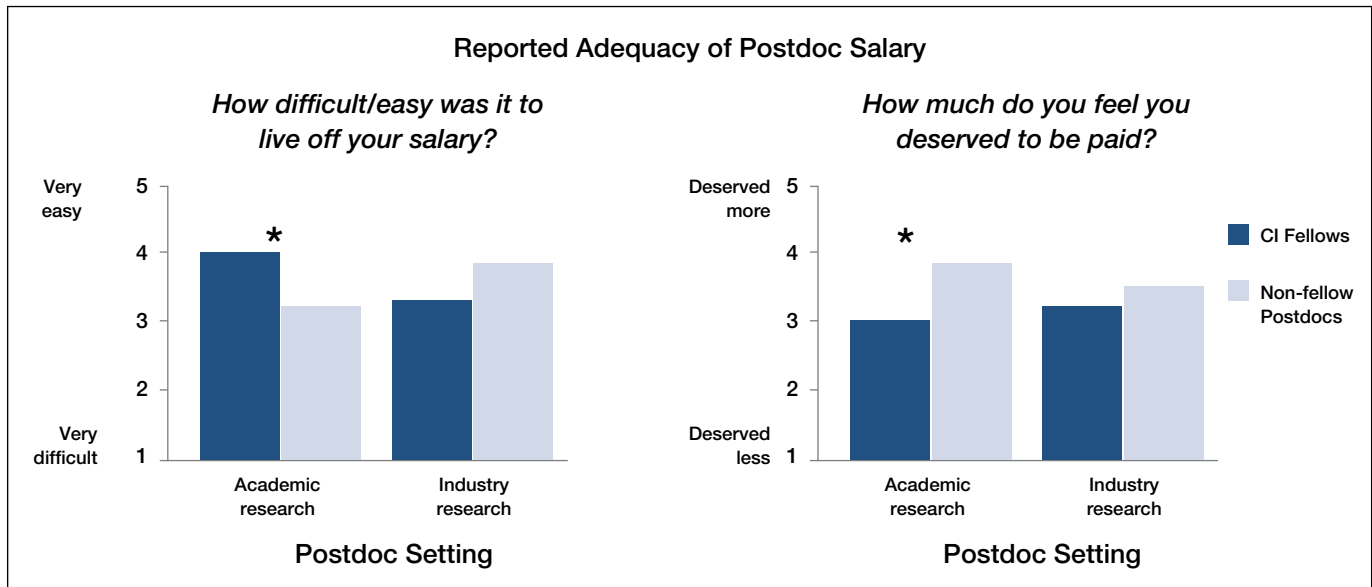
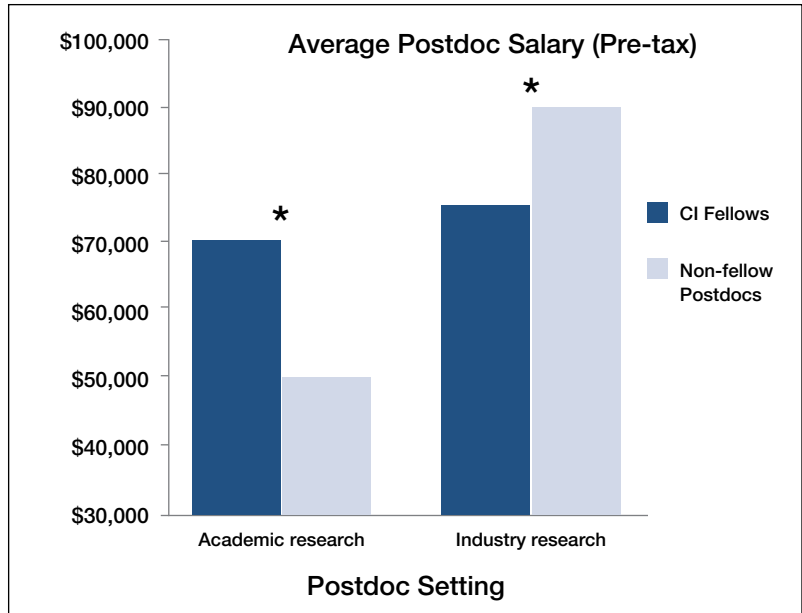


Center for Evaluating the Research Pipeline Infographic

By CRA Staff

CI Fellowship provides higher, more livable postdoc salary in academia relative to conventional postdocs

Applicants who had applied to the Computing Innovation (CI) Fellowship Program in 2009, 2010, or 2011 were recruited during the fall of 2013 to complete CERP's survey of postdoc experiences. We compared the responses and outcomes of CI Fellows ($n = 66$) to non-fellows who had other postdoc experiences (i.e., Non-fellow Postdocs; $n = 124$). CI Fellows reported *higher* salaries than Non-fellow Postdocs for *academic* research postdocs, but *lower* salaries than Non-fellow Postdocs for *industry* research postdocs, $ps < .01$. In academic settings, CI Fellows found it easier to live on their postdoc salary and were more satisfied with their pay than Non-fellow Postdocs, $ps < .01$. In industry settings, there were no group differences in perceived adequacy of pay.



Note: * $p < .01$



**Center for
Evaluating the
Research Pipeline**

This analysis is brought to you by the CRA's Center for Evaluating the Research Pipeline (CERP). Want CERP to do comparative evaluation for your program or intervention? Contact cerp@cra.org to learn more. Be sure to also visit our website at <http://cra.org/cerp/>.

2014 CRA Distinguished Service and A. Nico Habermann Awardees Announced

The CRA Board of Directors has announced its selections of the 2014 Service Awards.



**Vinton G. Cerf –
Distinguished Service Award
Winner**

Vint Cerf has served on a number of international committees and used his influence to guarantee a healthy development of the Internet. As ARPA program manager in the 70's, he helped develop and promote the basic packet technology that enabled the Internet. In 1992, he co-founded the Internet Society helping to develop the best protocols

and standards for the fast growing network. Cerf chaired the board of ICAAN (2000-2007) and currently chairs the board of ARIN, organizations that coordinate domain naming. He has been a major promoter of IPV6. Vint has served on PITAC, chaired the visiting committee on advanced technology for NIST and now sits on the National Science Board. Vint currently serves as president of the ACM and sits on several advisory boards.

The Internet was Vint's baby and as a proud parent, Vint continued to work diligently to oversee its childhood and adolescence to go on to become the great network we have today.



**Nancy Amato –
A. Nico Habermann Award
Winner**

Nancy Amato has been a tireless and highly effective leader of programs that engage women and underrepresented minorities in computing research, particularly the CRA-W Distributed Research Experiences for Undergraduates program. Committee members were very impressed with the breadth of her work both at her home institution and

nationally with organizations including CRA-W, CDC, NCWIT and the Grace Hopper conference. Her nominators provided data showing strong impact on the participation and success of women as well as members of underrepresented groups in computing research. She has also been an effective supporter of the Tapia conference.

Collaborative Research Experiences for Undergraduates (CREU)

Application Deadline: May 19th, 2014

Sponsored by CRA's Committee on the Status of Women in Computing Research (CRA-W) and the Coalition to Diversify Computing (CDC), the CREU program is aimed toward increasing the number of women and underrepresented minorities who go on to CS&E graduate programs. The CREU program includes not only computer science and computer engineering research, but also collaborative, multidisciplinary research with a significant computer science emphasis. Students have the opportunity to conduct

undergraduate research at their home institution during the academic year. Each student from an underrepresented group receives a stipend. Teams can also request travel funding to present their work at conferences or meetings. In some cases, projects may be granted funding to continue in the summer following the academic year of research.

For more details, go to the CRA-W web site (<http://www.cra-w.org/>), and select "Collaborative Research Experience for Undergraduates" from the "Undergraduate" menu.



2013 Taulbee Report Sneak Preview

By Stu Zweben and Betsy Bizot

The 2013 Taulbee Report will be published in the May 2014 issue of *CRN*. However, as we did last year, we're offering you a preview of the degree and enrollment numbers for bachelor's and doctoral level programs in the departments responding to the survey.

For the second year in a row, the total number of Ph.D.s awarded was the highest ever reported in Taulbee. The departments that responded this year reported 1,991 graduates in 2012-13, surpassing the 1,929 reported for 2011-12 by last year's respondents.

Since the specific departments reporting from one year to the next vary, it is of interest to focus on the set of departments who reported in both years. The accompanying table shows the one year comparison of some key bachelor's and doctoral data for these departments.

Again this year, the enrollment data show very strong growth at the bachelor's level, with a 22 percent increase in bachelor's enrollment during 2012-13 as compared with 2011-12 in U.S. CS departments. The corresponding increase for all departments reporting both years is 21.1 percent.

New bachelor's students in fall 2013 are up 13.7 percent over the previous year in U.S. CS departments, and are up 13.8 percent among all departments, while the number of bachelor's graduates increased only 0.9 percent among U.S. CS departments and was basically unchanged (down 0.1 percent) among all departments reporting both years.

At the doctoral level, the situation is different. Overall reported Ph.D. production for 2012-13 among U.S. CS departments reporting both years rose 6.8 percent, and rose 7.9 percent among all departments reporting both years. However, total doctoral enrollment is slightly down, with a 1.2 percent decrease among U.S. CS departments and a 1.4 percent decrease among all departments reporting both years. The number of new doctoral students for fall 2013 fell 8.1 percent among U.S. CS departments and 6.4 percent among all departments, when compared with the fall 2012 figures.

Watch the May 2014 *CRN* for a more complete analysis of the Taulbee data.

Table 1. Degree Production and Enrollment Change From Previous Year

| | Only Departments Responding Both Years | | | | | |
|----------------|--|--------|-------|-----------------|--------|-------|
| | US CS Only | | | All Departments | | |
| | 2012 | 2013 | % chg | 2012 | 2013 | % chg |
| PhDs | | | | | | |
| # Departments | 129 | 129 | | 159 | 159 | |
| PhD Awarded | 1,495 | 1,596 | 6.8% | 1,777 | 1,917 | 7.9% |
| PhD Enrollment | 12,121 | 11,977 | -1.2% | 14,316 | 14,117 | -1.4% |
| New PhD Enroll | 2,518 | 2,315 | -8.1% | 2,827 | 2,645 | -6.4% |
| Bachelor's | | | | | | |
| # Departments | 123 | 123 | | 146 | 146 | |
| BS Awarded | 11,614 | 11,722 | 0.9% | 14,168 | 14,155 | -0.1% |
| BS Enrollment | 49,564 | 60,453 | 22.0% | 59,867 | 72,487 | 21.1% |
| New BS Majors | 14,175 | 16,122 | 13.7% | 17,180 | 19,549 | 13.8% |
| BS Enroll/Dept | 403.0 | 491.5 | 22.0% | 410.1 | 496.5 | 21.1% |

CRA BOARD MEMBERS

Sarita Adve, University of Illinois
David Bader, Georgia Institute of Technology
Ken Barker, University of Calgary
Ronald Brachman, Yahoo!
Tracy Camp, Colorado School of Mines
Corinna Cortes, Google Inc.
Anne Condon, U. British Columbia
Mary Czerwinski, Microsoft Research
Susan Davidson, University of Pennsylvania
Mary Fernández, MentorNet
Jeanne Ferrante, UC San Diego
Lance Fortnow, Georgia Institute of Technology
Jean-Luc Gaudiot, University of California, Irvine
Susan Graham, University of California, Berkeley
Eric Grimson, Massachusetts Institute of Technology
Laura Haas, IBM Research – Almaden
Brent Hailpern, IBM Research – Almaden
Julia Hirschberg, Columbia University
H.V. Jagadish, University of Michigan
Chris Johnson, University of Utah
Henry Kautz, University of Rochester
Jim Kurose, University of Massachusetts
Margaret Martonosi, Princeton University
Kathryn S. McKinley, Microsoft Research
P. Takis Metaxas, Wellesley College
J Strother Moore, The University of Texas at Austin
Greg Morrisett, Harvard University
Fred Schneider, Cornell University
Rob Schreiber, Hewlett-Packard
Andrew Sears, Rochester Institute of Technology
Margo Seltzer, Harvard University
Valerie Taylor, Texas A&M University
Ellen Zegura, Georgia Institute of Technology

CRA BOARD OFFICERS

J Strother Moore, Chair, University of Texas, Austin
Laura Haas, Vice-Chair, IBM Almaden Research Center
Ronald Brachman, Treasurer, Yahoo!
Susan B. Davidson, Secretary, University of Pennsylvania
Julia Hirschberg, Appointed Member, Columbia University

CRA STAFF

Andrew Bernat, Executive Director
Betsy Bizot, Director of Statistics and Evaluation
Sandra Corbett, Manager of Administrative Support
Jessica Cundiff, Research Analyst, Center for Evaluating the Research Pipeline
Ann Drobnis, Director, Computing Community Consortium
Peter Harsha, Director of Government Affairs
Sabrina Jacob, Administrator
Ama Nyame-Mensah, Research Assistant, Center for Evaluating the Research Pipeline
Brian Mosley, Policy Analyst
Erik Russell, Director of Programs
Shar Steed, Communications Specialist
Jane Stout, Director, Center for Evaluating the Research Pipeline
Heather Wright, Research Assistant, Center for Evaluating the Research Pipeline

COLUMN EDITOR

Expanding the Pipeline
Patty Lopez, Intel

Professional Opportunities

Carnegie Mellon University

Teaching-Track Position

Carnegie Mellon University's Institute for Software Research in the School of Computer Science and its School of Information Systems & Management at the Heinz College invite applications for a teaching-track position beginning in the fall 2014 semester, or earlier. This is a career-oriented, fixed and renewable non-tenure appointment for teaching courses and managing student projects at the professional master's level.

Applicants for the position should have an M.S. or Ph.D., preferably in computer science, software engineering, or a related field. We are seeking demonstrated excellence in teaching technical courses, and several years of professional experience in software engineering. Teaching-track appointments are typically at the rank of Assistant Teaching Professor, with the possibility of promotion to the ranks of Associate Teaching Professor and Full Teaching Professor. Teaching-track ranks are not tenured.

Preferred qualifications include broad industry experience, teaching experience at a university or in industry, and familiarity with current software engineering practices and methods. We are particularly interested in candidates with teaching experience in one or more of the following areas: distributed systems; machine learning; distributed data systems architectures; data science (big data, data mining, visualization, warehousing, analytics, and empirical methods); very large information systems (VLIS); and systems engineering. Ideally the candidate should also have familiarity with a number of project management practices and methodologies such as PMBOK and CMMI.

How to Apply

A complete application packet will include the following:

- A cover letter addressing the required qualifications for this position.
- Curriculum Vitae
- A one page summary of the applicant's teaching experience.
- A two page statement describing the applicant's teaching philosophy, and ideas for future directions for software engineering education.

Additionally, the applicant should arrange to have three letters of reference sent directly to the ISR-Heinz Search Committee, c/o Margaret Gasdick, Institute for Software Research, Wean Hall 5121, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh PA 15213. Complete candidate packets can be emailed to: gasdick@cs.cmu.edu

Review of applications will begin May 1, 2014 and will continue until an acceptable candidate is found.

Required Application Documents

- Cover Letter
- Curriculum Vitae or Resume
- Summary of Teaching Experience
- Statement of Teaching Philosophy
- Letters of Recommendation

Fontbonne University

Math & Computer Science Department

Tenure Track Faculty

The Department of Mathematics and Computer Science at Fontbonne University launched an exciting new major in Cyber Security in fall 2013. As a result of the new major, the Department will hire a new full-time, tenure-track faculty member to join its existing faculty members in Cyber Security. The newly-hired faculty member will have an opportunity to design and teach upper division courses in cyber security as well as continue his/her research. The successful candidate should be a dedicated teacher who can motivate students to master the skills, concepts and methods of cyber security as well as other subject areas of computer science.

Requirements of the position:

- Ph.D. in cyber security, computer science, computer engineering, software engineering or a related field. Preference will be given to candidates with strong cyber security credentials and experience in system administration of network devices.
- Teach general computer science courses as well as those in cyber security.
- Assume department and university responsibilities including advising students, participating in departmental activities and university governance.
- Support the university's statements of Mission, Values and Commitment.

Review of applicants will begin on January 1, 2014, and will continue until the position is filled. Applicants should send a current CV, statement of teaching philosophy, evidence of teaching effectiveness, copies transcripts and the names of three references along with contact information to:

Human Resources
Fontbonne University
6800 Wydown Boulevard
St. Louis, MO 63105
Or via email to: resumes@fontbonne.edu

EOE

Everett Community College Computer Science Instructor – Tenure Track

Everett Community College is seeking a full-time instructor in the Engineering and Computer Science Department. This is a tenure-track position reporting to the Math & Science Division Dean. The successful candidate will prepare and teach introductory Computer Science courses ranging from introductory programming to advanced data structures

Minimum Qualifications:

- M.S. or PhD in Computer Science, Applied Mathematics, Electrical Engineering or related field.
- Demonstrated preparation for teaching introductory Computer Science courses
- Demonstrated experience, and/or classroom strategies for, effectively instructing students from diverse backgrounds.

For a full description and to apply online: <http://apptrkr.com/429468>

EOE



Professional Opportunities

George Mason University

Volgenau School of Engineering - Department of Applied Information Technology

Professor and Department Chair

The George Mason University, Department of Applied Information Technology welcomes nominations and applications for a distinguished and accomplished individual to serve as Chair of the department, at the rank of Professor. We particularly desire candidates with demonstrated scholarship and research interests in an area that supports the department's mission to provide a premier graduate and undergraduate applied information technology education focused on and responsive to the unique technology, management, leadership and innovation needs of government, government-related, and corporate employers.

The Department of Applied Information Technology has some of the most successful graduate and undergraduate programs at the university. It offers a B.S. and M.S. in Applied Information Technology, and participates in the school-wide Ph.D. program in Information Technology. Its Accreditation Board for Engineering and Technology (ABET)-accredited B.S./AIT program is the largest undergraduate program in the Volgenau School of Engineering (VSE). The majority of its undergraduate students transfer from the Virginia Community College System. The department is also a participant in the proposed M.S. in Data Analytics Engineering which is expected to launch in fall 2014. The department is recognized as a leader in designing and delivering customized applied information technology programs for intelligence community agencies. The department has 19 full-time faculty in a mix of tenured, tenure-track and term positions, as well as numerous adjunct faculty. The adjunct professors, in particular, bring business and government expertise and the knowledge needed to teach practical examples of the application of information technology to the solution of business and government problems. Faculty in the department conduct research in areas including information security, artificial intelligence, and IT entrepreneurship, and are affiliated with some of the VSE's major research centers.

Qualifications:

We are seeking an outstanding individual who will bring new ideas to the program; who is enthusiastic about both undergraduate and graduate teaching; who has the ability to lead the department to higher levels of accomplishment and recognition; and who has a strong commitment to scholarship and an outstanding collaborative research record. Applicants should hold an earned doctorate in a related field, have a strong record of scholarship and externally funded research, have significant leadership experience, and have knowledge and/or experience

in the application of information technology. Information about the department is available at <http://ait.gmu.edu/>.

In 2013, VSE ranked sixth among U.S. schools for return on investment (ROI) by Payscale.com and [Affordable Colleges.com/](http://AffordableColleges.com/). Enrollment at Mason is approximately 34,000, with students studying in over 198 degree programs. The Volgenau School of Engineering maintains close ties with the engineering community in northern Virginia and the metropolitan Washington, D.C., area in both industry and government. For more information about the Volgenau School of Engineering please see <http://volgenau.gmu.edu/>.

For full consideration, please submit an online faculty application at <http://jobs.gmu.edu> for position number F9769z; and attach a curriculum vita, a letter of intent, and the contact information for three professional references. Questions about the application process and nominations should be directed to: Dr. Stephen Nash, snash@gmu.edu. Review of applications will begin February 4, 2014, and will continue until the position is filled.

AA/EOE

Hardin-Simmons University

Hardin-Simmons University Kelley College of Business

Assistant/Associate Prof of Computer Science

Assistant/Associate Professor of Computer Science at Hardin-Simmons University in Abilene, TX. Christian educator. Normal teaching load 12 hours per semester. Require masters in computer science or related field, Ph.D. preferred.

Other requirements at <http://www.hsutx.edu/employment/applicants/faculty>. Vita, statement of commitment to Christian higher education, copies of transcripts to Michael Monhollon, mikem@hsutx.edu.

IBM T.J. Watson Research Center

Health Informatics Department

Research Scientists and Postdoctoral Researchers – Visualization, Data Mining, and Medical Informatics

The Healthcare Analytics Research Group at IBM T.J. Watson Research Center is looking for research scientists and postdoctoral candidates with interest in the fields of **visual analytics** and **data mining**. Our interdisciplinary research group is composed of researchers in visualization, data mining, and text analytics, working alongside medical scientists and bio-statisticians.

The ideal candidate should possess or be nearing completion of a doctorate in computer science, medical informatics or bio-statistics with a demonstrated interest in the use of visual analytics or data mining.

For more information on how to apply, please visit: <http://bit.ly/1nzmot7>

Max Planck Institute for Software Systems

Security and Privacy (S&P) group

Postdoc positions in IT-Security, Privacy, and Cryptography

The security and privacy (S&P) group at the Max Planck Institute for Software Systems is currently offering postdoc positions under the supervision of Michael Backes. The S&P group collaborates closely with the Center for IT-Security, Privacy and Accountability (CISPA) at Saarland University.

MPI-SWS is a publicly funded academic research institution focused on problems of fundamental importance in the broad area of software systems. The S&P group conducts research in various aspects of IT-security, privacy, and cryptography. Topics of particular interest include, but are not limited to:

- design and formal verification of security protocols, programs, and architectures,
- privacy enhancing technologies in a broad sense, e.g., privacy in data acquisition, processing, and publishing,
- network and operating systems security,
- web security,
- reliability, accountability and trust,
- cryptography,
- as well cross-cutting disciplines such as usability and social aspects in this research field

The positions are offered for two years, with the possibility of renewal for another year. Postdoc applicants are required to hold a doctoral degree in computer science or a closely related area, or have it completed at the time of taking up the position. We expect successful applicants to have a strong background in one or more of the aforementioned research topics, and to maintain an outstanding academic track record. The working and teaching language is English.

Postdoctoral Fellows have the opportunity to work with MPI-SWS faculty on existing lines of research, as well as develop their own research agenda under MPI-SWS faculty supervision. Former Postdoctoral Fellows have moved on to take permanent position at top universities and research laboratories worldwide, including Yale, Telecom ParisTech, Microsoft Research and INRIA.

Professional Opportunities

The institute is committed to increasing the representation of minorities, women and individuals with physical disabilities in computer science. We particularly encourage such individuals to apply.

Application Instructions:

Applications should contain a CV, copies of transcripts, certificates as well as a research statement and two references. Applications will be accepted for evaluation until the positions have been filled. Please send your application to Michael Backes via e-mail.

Contact: Prof. Dr. Michael Backes

E-Mail: application-backes@infsec.cs.uni-saarland.de

About the location:

Saarland University is the home of one of the highest-ranked CS departments in Germany. In the department's immediate proximity are the Max Planck Institute for Informatics (MPI-INF), the Max Planck Institute for Software Systems (MPI-SWS), the German Center for Artificial Intelligence (DFKI), the Excellence Cluster for Multimodal Computing and Interaction (MMCI), as well as the Intel Visual Computing Institute (IVCI). The close interactions and collaborations between these institutes, and their joint interest in IT-security research, enables CISPA to address research problems in IT-security in a comprehensive manner.

Max Planck Institute for Software Systems (MPI-SWS)

Senior Faculty Position in Software Systems

Applications are invited for a senior faculty position in the Max Planck Institute for Software Systems (MPI-SWS). The position is that of a director and scientific member of the Max Planck Society, and is comparable to an endowed chair position at a leading university. Directors lead their individual research groups, and also provide strategic direction for the institute, mentor junior faculty, and take turn in chairing the faculty. A successful candidate is an internationally recognized leader in the research community, and pursues a compelling and far-reaching research vision.

All areas related to the study, design, and engineering of software systems are considered. These areas include, but are not limited to, security and privacy, embedded and mobile systems, social computing, large-scale data management, programming languages and systems, software verification and analysis, parallel and distributed systems, storage systems, and networking. Preference will be given to candidates whose research complements existing strengths.

MPI-SWS, founded in 2005, is part of a network of 82 Max Planck Institutes, Germany's premier basic research facilities. MPIs have an established record of world-class, foundational research in the fields of medicine, biology, chemistry, physics, technology and humanities. Since 1948, MPI researchers have won 17 Nobel prizes. MPI-SWS aspires to meet the highest standards of excellence and international recognition with its research in software systems.

To this end, the institute offers a unique environment that combines the best aspects of a university department and a research laboratory:

- Faculty independently lead a team of graduate students and post-docs. They have full academic freedom and publish their research results freely. Substantial base funding complements third-party funds.
- Faculty supervise doctoral theses, and have the opportunity to teach graduate and undergraduate courses.
- Faculty are provided with outstanding technical and administrative support facilities as well as internationally competitive compensation packages.

MPI-SWS currently has 10 tenured and tenure-track faculty and 50 doctoral and post-doctoral researchers. The institute is funded to support 17 faculty and up to 100 doctoral and post-doctoral positions. Additional growth through outside funding is expected. We maintain an open, international and diverse work environment and seek applications from outstanding researchers regardless of national origin or citizenship. The working language is English.

The institute is located in Kaiserslautern and Saarbruecken, in the tri-border area of Germany, France and Luxembourg. The area offers a high standard of living, beautiful surroundings and easy access to major metropolitan areas in the center of Europe, as well as a stimulating, competitive and collaborative work environment. In immediate proximity are the MPI for Informatics, Saarland University, the Technical University of Kaiserslautern, the German Center for Artificial Intelligence (DFKI), and the Fraunhofer Institutes for Experimental Software Engineering and for Industrial Mathematics.

Qualified candidates are invited to send a CV and cover letter to rupak@mpi-sws.org. The review of applications will begin on Feb 1, 2014; applications will continue to be accepted until the position is filled.

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

Purdue University

Department of Computer Science

Continuing Lecturer

The Department of Computer Science at Purdue University invites applications for a Continuing Lecturer position beginning May 2014. This position is a non-tenure track instructor position. Duties include teaching and development of computer science undergraduate lecture and laboratory courses. Applicants should hold an M.S. degree in Computer Science or related field with at least 3 years of teaching experience and be proficient in teaching programming concepts (such as data types, conditionals, repetition, data collections, algorithms), programming languages (such as C, C++, Java, Python), data structures (such as lists, trees, graphs), foundations of computer science (such as sets, functions, relations, number representations, algorithm analysis), computer architecture (such as instruction sets, memory and address spaces, assembly language), and systems programming (such as processes, threads, system calls, library functions, embedded systems).

A successful candidate will have interest in and ability to teach large lecture sections, interact with students in small laboratory sections, and train and supervise a large number of undergraduate teaching assistants. A strong commitment to excellence in teaching and exceptional organizational skills is expected.

This position carries competitive salary and benefits. A continuing lecturer will have access to world class departmental and university computing facilities in addition to computing equipment for the preparation and delivery of course material. Further information about the department can be found at <http://www.cs.purdue.edu>.

Review of applications will begin on February 17, 2014, and continue until the position is filled. Applicants are strongly encouraged to apply electronically by sending a .PDF file containing curriculum vitae, a statement of teaching interests and objectives, and names and contact information of at least three references to lect-search@cs.purdue.edu. Hard copies of applications can be sent to:

Chair, Lecturer Search Committee
Department of Computer Science
305 North University Street
Purdue University
West Lafayette, IN 47907-2107

A background check will be required for employment. Purdue University is an Equal Opportunity/Equal Access/Affirmative Action employer committed to achieving a diverse workforce.

Professional Opportunities

JOIN THE INNOVATION.



معهد قطر لبحوث الحوسبة
Qatar Computing Research Institute

عضو مؤسسة قطر *Member of Qatar Foundation*

Qatar Computing Research Institute seeks talented scientists and software engineers to join our team and conduct world-class applied research focused on tackling large-scale computing challenges.

We offer unique opportunities for a strong career spanning academic and applied research in the areas of Arabic language technologies including natural language processing, information retrieval and machine translation, distributed systems, data analytics, cyber security, social computing and computational science and engineering.

Scientist applicants must hold (or will hold at the time of hiring) a PhD degree, and should have a compelling track record of accomplishments and publications, strong academic excellence, effective communication and collaboration skills.

Software engineer applicants must hold a degree in computer science, computer engineering or related field; MSc or PhD degree is a plus.

We also welcome applications for post-doctoral researcher positions.

As a **national research institute** and proud member of Qatar Foundation, our research program offers a collaborative, multidisciplinary team environment endowed with a comprehensive support infrastructure.

Successful candidates will be offered a highly competitive compensation package including an attractive tax-free salary and additional benefits such as furnished accommodation, excellent medical insurance, generous annual paid leave, and more.

For full details about our vacancies and how to apply online please visit <http://www.qcri.qa/join-us/>

For queries, please email QFJobs@qf.org.qa

 /QCRI.QA  @QatarComputing  QatarComputing

 QatarComputing www.qcri.qa

Professional Opportunities

Qatar University

Department of Computer Science

Postdoctoral Researcher

Qatar University and Northwestern University are seeking a postdoc who wants to help design and evaluate next generation privacy and security technologies for smart phones. We're seeking expertise in operating systems, Android, privacy, and security.

<http://www.vsecurity.info/postdoc>

San Mateo County Community College District

Part-time Computer Science Instructor (Pool)

The San Mateo Community College District is recruiting for a Part-time Computer Science Instructor (Pool).

Please use the following link to review the posting and apply online.

https://jobs.smccd.edu/applicants/jsp/shared/position/JobDetails_css.jsp?postingId=143156

Stony Brook University School of Medicine

Informatics (Chief Technology Officer) Assistant Professor, Associate Professor or Professor
Department of Biomedical

The Department of Biomedical Informatics is inviting applications for Chief Technology Officer (Academic Title of Assistant Professor, Associate Professor or Full Professor in the area of Data Analytics Software Architecture).

It will be required that the chosen individual have a Ph.D. in in computer science, electrical and computer engineering or similar field. Significant research or enterprise experience in systems

software development, data analytics and information management. Excellent computer programming and database skills including C/C++, Java, SQL, Hadoop/MapReduce and experience with scripting/programming of automation tasks for data access and data processing. Strong organizational, interpersonal and communication skills are necessary. Excellent problem solving skills. Must have the ability to multi task and work independently. Candidates should be analytical thinkers with excellent working knowledge relational database, NOSQL tools and semantic modeling.

It is preferred that the candidate have experience in development and/or use of data streaming and in-transit computation tools and methods. A strong track record of working with real world data analytics problems in application settings. Experience with semantic modeling, reporting tools, SAS, R.

The successful candidate will serve as the Chief Technology Officer and evaluate new technologies



STANFORD UNIVERSITY

SOFTWARE DEVELOPER - 61585

1 year fixed term with possibility to extend

Work at the intersection of STEM education, hands-on learning, Massive Open Online Courses (MOOCs), cloud experimentation, and games. Implement an integrated software environment that enables schoolchildren and students to carry out real biology experiments over the web, use sensors and cameras to collect the data, and create computer models to simulate biological phenomena.

Requires Bachelor's degree or a combination of education and relevant experience. Strong programming skills in one or more of the following: Python, HTML5, databases; demonstrated by working 1 or more years full-time on a relevant project or equivalent; could have been regular employment but also any other type of projects. Critical Competencies: Python, HTML5, web programming, database modeling, and a passion for natural sciences. Previous experience with biology, mechatronics, Raspberry Pis, Arduinos, microcontrollers, education, games, or graphics are a plus.

For more information and to apply, visit <http://apptrkr.com/436192>

Stanford University is an affirmative action, equal opportunity employer.

Professional Opportunities

and will lead the effort to leverage recent dramatic advances in data analytic tools and capabilities for use in Stony Brook Medicine, the Stony Brook Network and the emerging collection of affiliated hospitals and practices. This candidate will focus on development of systems architectures needed to 1) integrate clinical, operational, financial information, carry out analyses and to interface with transactional systems and 2) leverage data streams to carry out near real time analyses and decision support in a variety of care settings. A key challenge will be to integrate state of the art data analytics and stream based infrastructures with existing vendor electronic patient record systems, financial systems and PACS systems.

The successful candidate is expected to work with multi-disciplinary teams in collaborative projects. In addition to leading evaluation, deployment and integration of data analytic technologies, the successful candidate is expected to engage the external technical community through publication and presentation of results in peer-reviewed journals and conferences.

To qualify for tenure and/or a senior faculty appointment, the candidate must meet the criteria established by the School of Medicine (School of Medicine's Criteria for Appointment, Promotion and Tenure). Qualified applicants are invited to submit a complete application including their CV, and names and addresses of three or more professional references.

Andrew White, Ph.D.
c/o Patricia Liggan
Stony Brook Medicine BST Level9, Room 140
Stony Brook University
Stony Brook, NY 11794-8691
Fax#: 631-444-2661

Anticipated Start Date: As soon as possible (with the Special Notes indicating "Applications will be accepted until position is filled"). Posting Closing Date: 05/01/2014. For a full position description, visit <http://www.stonybrook.edu/jobs/> (Ref. # F-8426-14-01).

Stony Brook University/SUNY is an affirmative action, equal opportunity employer.

University of California, Irvine

Department of Electrical Engineering and Computer Science

Faculty Position in Computer Engineering

The Department of Electrical Engineering and Computer Science at the University of California, Irvine invites applications for a tenure-track faculty position at the level of assistant professor in several areas of Computer Engineering and Computer Systems, including computer

architecture, embedded systems, cyber physical systems, networked systems, high-performance computing, and secure, trusted and dependable systems. Applicants must have a Ph.D. in a related area, have demonstrated an outstanding record of achievements in their field of research, and have a strong commitment to teaching at the undergraduate and graduate levels. The candidate is expected to be a major contributor and enabler in large multidisciplinary grant proposals in areas such as Secure and Trusted Systems, Networked Systems, Cyber-Physical Systems, Cyber-Enabled Sustainability Science and Engineering, and Expeditions in Computing.

Qualified applicants should submit their cover letter, curriculum vitae, list of publications, up to three key publications, statements of research and teaching, and the names of three or more references via the URL <https://recruit.ap.uci.edu>.

Screening will begin immediately upon receipt of a completed application. Applications will be accepted until the position is filled, although maximum consideration will be given to applications received by March 15, 2014.

More information about the department can be found at <http://www.eng.uci.edu/dept/eecs>.

One of the youngest University of California (UC) campuses, UC Irvine is ranked the first in the United States and the fifth in the world among universities less than 50 years old, according to the Times Higher Education survey. Compensation is competitive with the nation's finest universities, and includes priority access to on-campus for-sale faculty housing. UC Irvine is located 4 miles from the Pacific Ocean and 45 miles south of Los Angeles. The area offers a very pleasant year-round climate, numerous recreational and cultural opportunities, and one of the highest-ranked public school systems in the nation.

UC Irvine is an equal opportunity employer committed to excellence through diversity and encourages applications from women, minorities, and other under-represented groups. UC Irvine is responsive to the needs of dual career couples, is dedicated to work-life balance through an array of family-friendly policies, and is the recipient of an NSF Advance Award for gender equity.

University of Central Florida

Center for Research in Computer Vision

Multiple Assistant Professor Positions

CRCV is looking for multiple tenure-track faculty members in the Computer Vision area. Of particular interest are candidates with a strong track record of publications. CRCV will offer competitive salaries

and start-up packages, along with a generous benefits package offered to employees at UCF.

Faculty hired at CRCV will be tenured in the Electrical Engineering & Computer Science department and will be required to teach a maximum of two courses per academic year and are expected to bring in substantial external research funding. In addition, Center faculty are expected to have a vigorous program of graduate student mentoring and are encouraged to involve undergraduates in their research.

Applicants must have a Ph.D. in an area appropriate to Computer Vision by the start of the appointment and a strong commitment to academic activities, including teaching, scholarly publications and sponsored research. Preferred applicants should have an exceptional record of scholarly research. In addition, successful candidates must be strongly effective teachers.

To submit an application, please go to: <http://www.jobswithucf.com/postings/34681>

Applicants must submit all required documents at the time of application which includes the following: Research Statement; Teaching Statement; Curriculum Vitae; and a list of at least three references with address, phone numbers and email address.

Applicants for this position will also be considered for position numbers 38406 and 37361.

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

The University of Cincinnati

Assistant, Associate & Full Professor

As many as ten faculty positions are available within the University of Cincinnati's College of Engineering and Applied Science (CEAS) in five interdisciplinary research pathways.

- Environment: (214UC7347)
- Information Science: (214UC7375)
- Manufacturing and Services: (214UC7376)
- Sensing: (214UC7377)
- Health: (214UC7378)

Successful candidates will have primary appointment in one of six CEAS departments, and potential secondary appointments within/outside the College. For information on CEAS: <http://www.ceas.uc.edu>.

Information/apply: Select "Search Postings" at <https://www.jobsatuc.com/>. Enter number corresponding to interest. Applications should include candidate's cv, name and contact information for three references (minimum), and

Professional Opportunities

cover letter summarizing candidate's research plans, teaching interests and how to build a culturally diverse educational environment.

The University of Cincinnati is an affirmative action/equal opportunity employer. UC is a smoke-free work environment.

University of Louisiana at Lafayette

Computer Science Department

Assistant Professor

The School of Computing and Informatics at the University of Louisiana at Lafayette invites applications for a faculty position at the Assistant Professor level. The successful applicant will hold a PhD in Computer Science or a closely related field and have a demonstrated commitment to undergraduate computer science education and potential for establishing a research program. Responsibilities will include teaching, research, advising, and professional service. Preference will be given to candidates with expertise in: foundation courses in theoretical computer science, cyber security, and software engineering.

Applicants should send a CV, a statement of teaching and research interests, and contact information for three professional references to the chair of the search committee at jne1390@louisiana.edu.

University of Massachusetts, Amherst

School of Computer Science

Lecturer Position in Computer Science

The School of Computer Science at the University of Massachusetts Amherst invites applications for a full-time, nine-month, non-tenure-track faculty position at the rank of Lecturer for the 2014-2015 academic year.

Primary responsibilities include teaching up to six courses per year for majors and non-majors, curriculum development, undergraduate advising, as well as additional administrative and scholarly duties as determined by the Chair of the School.

Applicants should hold a graduate degree in Computer Science, Computer Engineering or a closely related field (Ph.D. preferred), and have a strong interest in, or a proven record of excellence in teaching undergraduate computer science courses, especially undergraduate courses in software engineering.

Successful applicants will find the School of Computer Science to be a stimulating, diverse environment conducive to professional growth

in both teaching and research. Lecturers are considered an essential part of the faculty and participate in faculty meetings and school decisions. Amherst, a historic New England town, is the center of a vibrant and culturally rich area that includes four other colleges. For more information about the department, visit <http://www.cs.umass.edu/>.

The initial appointment to this position will be for one year, with the possibility of reappointment for subsequent periods.

To apply, please send a cover letter referencing search R45861 (CS/Software Engineering); a curriculum vitae; a description of teaching experience; and the names and contact information for at least three references. Electronic submission of application materials in PDF format is preferred. Send to lecturer@cs.umass.edu. Alternatively, paper copies of application materials may be sent to: Lecturer Search Committee, School of Computer Science, University of Massachusetts, Amherst, MA 01003.

Review of applications will begin on December 2, 2013 and will continue until the position is filled.

The University of Massachusetts Amherst is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply. The University seeks to increase the diversity of its workforce and student populations because broad diversity is critical to achieving the University's mission of excellence in education, research, educational access, and service in an increasingly diverse globalized society. Therefore, in assessing the qualifications of each applicant, we will favorably factor diverse perspectives, experiences, and backgrounds including overcoming or helping others overcome barriers to an academic career or degree.

University of Missouri-Columbia

Department of Computer Science

Postdoctoral Researcher

MU is inviting applications for a postdoctoral position in areas of network management and cloud computing. Promising candidates should have a PhD and proven ability, or strong potential, for excellence in research and development.

Applicants should submit CV and a Letter of Motivation to hiring.cs@missouri.edu. Deadline for application is April 15th, 2014.

University of Newcastle

Faculty of Engineering and Built Environment - School of Electrical Engineering and Computer Science

Research Associate – Academic Level A or B - Position No. 2364

The successful candidate will develop a research program by using supercomputer-based approaches together with memetic algorithms, will address the first key areas in graph optimization.

You will develop state-of-the-art algorithms for problems in the key areas of network alignment, identification of connected-cohesive subnetworks (and other community detection algorithms) and embedding large graphs in multi-planar structures (i.e. variants of the book embedding problem in graphs).

- Have a relevant PhD or equivalent qualification;
- A strong publication record relative to opportunity, particularly in publishing research results in top-ranked international journals.
- Proven experience in addressing large-scale optimization problems, preferably in the area of graph optimization.
- Experience in heuristics and evolutionary computation metaheuristics.
- Proven skills in the area of design and analysis of algorithms and their efficient implementations using sophisticated data structures.

Other desirable qualifications;

- Experience in high-performance computing.
- Experience in Theoretical Computer Science and in particular in fixed-parameter tractability.

Please follow this link to apply; <http://www.newcastle.edu.au/about-uon/jobs-at-uon>

Applications close: Wednesday 02 April 2014

USC Beaufort, Bluffton, South Carolina

Human Resources

Assistant Professor of Computational Science, Tenure Track Faculty

The Department of Mathematics and Computational Science at the University of South Carolina Beaufort invites applications for two tenure-track faculty position in Computational Science beginning August 2014. Candidates are expected to have an earned doctorate in Computer/Computational Science (position 1) or Computational Engineering (position 2) at the time of employment.

Successful candidates will be able to teach undergraduate courses in i) Computer or Computational Science (particularly in data

Professional Opportunities

analytics and high performance computing) and ii) Computational Mechanical Engineering or Computational Aerospace engineering. Preferred candidate will have the ability to establish and maintain an independent, externally-funded research program in his/her discipline, a strong commitment to undergraduate teaching, and excellent communication skills. Of particular interest are candidates willing to engage in collaborative research with colleagues in other science or engineering disciplines. Besides teaching and research, responsibilities include professional and university service.

Applicants must use the online application for: <https://uscjobs.sc.edu/applicants/Central?quickFind=73015>

The University of South Carolina is an Affirmative Action/Equal Opportunity Institution. Women and minorities are encouraged to apply.

University of South Carolina Sumter

Instructor of Computer Science

The University of South Carolina Sumter invites applications for a full-time position to begin August 2014. A Ph.D. or M.S. in Computer Science at time of appointment required. A strong commitment to undergraduate teaching is essential. The teaching load will be twelve contact hours per semester. Review of credentials will begin January 2014 and will continue until position is filled.

The University of South Carolina requires individuals to apply online for all job vacancies. You may access the USC Jobs Online Employment site at <http://uscjobs.sc.edu>. As part of the online process, an application letter (which should include philosophy of teaching and professional goals and interests), vita, three current letters of recommendation, copies of all undergraduate and graduate transcripts, and summaries of teaching evaluations or other evidence of excellence in teaching must be attached to the online application form.

If you have any questions about the application procedures, please call (803) 938-3721. Foreign nationals should indicate current US immigration status. USC Sumter is an AA/EOE.

University of Wisconsin-Milwaukee

New Faculty Positions in the College of Engineering & Applied Science

The Computer Science faculty of the College of Engineering & Applied Science (CEAS) at the University of Wisconsin-Milwaukee invites applications for new tenure-track faculty positions

at all ranks. This recruitment is part of an effort in CEAS to develop unique strength and capability in four research cluster areas: Biomedical and Health; Energy and Sustainability; Advanced Manufacturing; Water and Environment. The Computer Science Department has particular opportunities to contribute to these areas through candidates with research expertise in data science including analytics, mining, machine learning, large databases, and visualization; biomedical informatics; embedded systems; robotics; engineering of high reliability and robust software systems; security; and transformational games.

UWM is a doctoral/research extensive university and Wisconsin's premier public urban institution, offering a comprehensive liberal arts, sciences and professional education at the undergraduate and graduate level to its 28,000 students. The College of Engineering & Applied Science consists of six departments – Civil Engineering and Mechanics, Electrical Engineering, Computer Science, Industrial Engineering, Materials, and Mechanical Engineering, with ABET accredited programs. The College has more than 1,500 undergraduate students and over 300 graduate students, both Master's and Doctoral. Greater Milwaukee, the third-ranked manufacturing center in the United States, is home to 400+ engineering firms and 1300+ manufacturing firms with annual receipts of 24 billion dollars. The College has a long history of industrial collaboration and research support.

For more information and to apply for these positions please go to <http://www.uwm.edu/CEAS/employment>.

Screening begins on February 1, 2014 and will continue until the positions are filled.

UWM is an equal opportunity/affirmative action employer. Employment will require a criminal background check.

Utah State University

Assistant Professor

Applications are invited for multiple open faculty positions at the Assistant Professor level, beginning Fall semester, 2014. Applicants must have completed a Ph.D. in Computer Science by the time of appointment. The positions require demonstrated research success and significant potential for attracting external research funding.

See <http://jobs.usu.edu/applicants/Central?quickFind=59360> for more information and to apply online.

AA/EO Employer

Wellesley College

Laboratory Instructor - Computer Science

Wellesley College invites applications for a full-time Instructor in Computer Science Laboratory, starting in the fall of 2014. Applicants should have a broad background in computer science and strong teaching, writing, and interpersonal skills. A Master's degree in Computer Science or a related field is required (PhD considered).

Responsibilities include preparing and teaching laboratory sections in introductory and intermediate computer science courses. The position provides ample opportunity for curriculum development, exploration of new pedagogies, and student mentorship. Information about the department can be found at <http://www.wellesley.edu/cs>.

Applicants should submit a cover letter and curriculum vitae at <https://career.wellesley.edu>. The names/email addresses of three references are requested. (The online application will request names/email addresses so that recommenders or dossier services may submit the letters directly.) Applications should also include a statement about teaching experience and interests. Applications will be reviewed starting March 15, 2014. If there are difficulties submitting online, please contact working@wellesley.edu for assistance. Questions about the position should be directed to Ellen Hildreth at ehildreth@wellesley.edu.

Wellesley College is especially interested in candidates who can contribute to the diversity and excellence of the academic community through their research, teaching and/or service. We are dedicated to building a culturally diverse and pluralistic faculty, and strongly encourage applications from underrepresented minorities and women.

Western University

Tier 2 Canada Research Chair

Western University, one of Canada's leading research intensive universities, seeks applicants for a Tier 2 Canada Research Chair in Medical Health Informatics. In accordance with the regulations set for Tier 2 Canada Research Chairs (www.chairs-chaires.gc.ca), the candidate will be an excellent emerging scientist who has demonstrated research creativity and innovation, and the potential to achieve international recognition in the field of medical health informatics within the next five to ten years. The Candidate must propose an original and innovative research program of high quality which would attract outstanding trainees, students and future researchers.

Applicants must hold a M.D., Ph.D., M.D. /Ph.D. and/or a D.D.S or equivalent. The successful candidate will be appointed in a tenure-track appointment at



Professional Opportunities

the rank of Assistant Professor, or at an Associate Professor level if qualifications and experience warrant. A joint-appointment between Departments best suited to the discipline(s) in the Schulich School of Medicine & Dentistry and the Faculty of Science will be made.

Our intention is to attract to Western a candidate who will establish an independent, externally funded research program and will have a strong research record and expertise in emerging technologies and data sources to be used in solving problems in clinical care and the public health care system. Applicants are encouraged to apply who have expertise in quantitative statistical methodologies, visual analytics/data mining, healthcare databases such as Electronic Medical Records and/or software development in the context of healthcare settings. The position will allow the candidate to take a leadership role in medical health informatics, which has been identified as an emerging area of research strength at Western University. In addition to research leadership, the successful candidate will be expected to make contributions to the training of undergraduate and graduate students in both Faculties through classroom teaching, student supervision and mentorship in the area of medical health informatics

Western University is undergoing an exciting transformation with an emphasis on interdisciplinary and interfaculty collaborations. Further information about the Schulich School of Medicine & Dentistry

can be found at www.schulich.uwo.ca, the Faculty of Science at www.uwo.ca/sci and/or at www.uwo.ca. Western's Recruitment & Retention Office is available to assist in the transition of successful applications and their families.

The application should include a detailed curriculum vitae, brief description of current research program, accomplishments, representative publications, and the names of three references. As well, the Candidate must include a proposal for an original, innovative, and high quality research program that would attract excellent trainees, students, and future researchers. Please send the complete application to:

Dr. Moira Stewart
Committee Chair, Tier 2 CRC in Medical Health Informatics
Schulich School of Medicine & Dentistry
The Western Centre for Public Health and Family Medicine
1151 Richmond Street
Western University
London, Ontario CANADA N6A 5C1
selection.committee@schulich.uwo.ca

Applications will be accepted until the position is filled. Review of applications will begin after March 1, 2014.

Positions are subject to budget approval. Applicants should have fluent written and oral communication skills in English. All qualified candidates are encouraged to apply; however, Canadians and

permanent residents will be given priority. Western University is committed to employment equity and welcomes applications from all qualified women and men, including visible minorities, aboriginal people and persons with disabilities.

Wheaton College (MA)

Computer Science

Visiting Professor of Computer Science

The Department of Mathematics and Computer Science at Wheaton College in Massachusetts invites applications for a one year, full-time visiting faculty position in Computer Science beginning in the fall of 2014.

Candidates should have a commitment to excellence in teaching; a Ph.D. or ABD in Computer Science is preferred, but an MS in Computer Science with experience will be considered. The successful candidate will teach a total of five courses and two labs during the academic year. At least one of the courses will be in the candidate's area of expertise.

Visit <http://cs.wheatoncollege.edu> for more information and to apply.

Wheaton seeks educational excellence through diversity and strongly encourages applications from women and men from historically underrepresented groups.