



CRA-Women

Winter 2015 Edition

NEWSLETTER

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Editors:

Carla Ellis, Duke University

Amanda Stent, Yahoo Labs

Highlight on Alum **Beth Trushkowsky**



Beth Trushkowsky is an assistant professor at Harvey Mudd College in the Computer Science department. She received her MS and PhD degrees from The University of California, Berkeley under the supervision of Professors Michael J. Franklin and Armando Fox. Her MS research focused on developing a storage system to support highly interactive social computing applications. The system was developed to allow web application developers to declaratively state application-specific consistency requirements, and to take advantage of cloud computing to provide cost-effective scale-up and scale-down. For her PhD, Trushkowsky worked on leveraging human intelligence via crowdsourcing to create hybrid human/machine query processing systems to aid in answering difficult queries. In particular, her work focused on developing algorithms to understand and tolerate crowd worker behaviors, allowing users to reason about query result quality. Prior to her years at UC Berkeley, Trushkowsky was an undergraduate at Duke University, where she participated in the CREU program.

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Ann Quiroz Gates Wins the Nico Habermann Award



The recipient of the 2015 A. Nico Habermann Award is Ann Quiroz Gates, Chair of the Department of Computer Science at the University of Texas at El Paso (UTEP). CRA awards the Habermann, usually annually, to a person who has made outstanding contributions aimed at increasing the numbers and/or successes of underrepresented groups in the computing research community.

For over two decades, Ann has been a leader in initiatives that support Hispanics and members of other underrepresented groups in the computing field.

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CRA-W

Computing Research
Association

Women

Exciting Events at the 2014

Grace Hopper Celebration of

The 2014 Grace Hopper Celebration of Women in Computing, held in Phoenix from Oct. 8th - 10th, hit several milestones. First, conference attendance dramatically increased to 8000 attendees from 4700 in 2013. Also, the first-ever Male Allies plenary panel, with top executives from Google, Facebook, GoDaddy, and Intuit, occurred; this panel was a well-intentioned session, but created more controversy among the attendees than the Grace Hopper Conference attendees have ever seen. And with a remark during his keynote, Microsoft CEO Satya Nadella made the issue of pay equality for men and women front page news and brought the conference to the attention of the world. These milestones led to several interesting hallway conversations, some of which verged on arguments with significantly different points of view. One thing was clear, however; most of the attendees (perhaps all) agree that we need men (and women) to solve the diversity challenges that exist. So kudos to Satya and the other top male executives for having the interest and courage to come to an event that is 95% female. And further kudos to the companies that are implementing changes in their organizations based on what transpired during this year's Grace Hopper Celebration of Women in Computing. Until women represent close to 50% of those in the computing industry, we need to continue these important conversations.



Notable Women in Computing Playing Cards - a Full House

Another exciting event at the 2014 Grace Hopper Celebration was the debut of the Notable Women in Computing card deck. Created by Katy Dickinson, Jessica Dickinson Goodman, and CRA-W Board member Susan Rodger (Duke University) to help publicize the CRA-W and Anita Borg Institute project to write Wikipedia pages for Notable Women in Computing, Cards may be purchased at <http://www.notabletechnicalwomen.org/>.

Since 2009 CRA-W has helped provide career mentoring content for attendees interested in academic and industrial research at the undergraduate, graduate, early career, and mid-senior career levels. Designed to be "bite-sized" versions of our longer workshops, including the Grad Cohort Workshop and Career Mentoring Workshops, our programs at Grace Hopper allow us to reach hundreds of attendees with career advice and make them aware of the additional programs CRA-W offers.

The CRA-W mentoring sessions took place on the afternoon of Oct 8th. For undergraduates, CRA-W staffed tables in the Student Opportunity Lab on four different topics: Undergraduate Research Experience, What Happens in Graduate School, How to Get Accepted to Graduate School, and Master's or Ph.D.? The Anita Borg Institute introduced the Student Opportunity Lab format in 2013 and continued it this year due to its popularity. The Lab is a large conference room with about 50 tables, each with different topics and 1-2 mentors. Short 20 minute sessions allow small groups of students to have interactive discussions with mentors at many different tables over the four-hour Student Opportunity Lab session. CRA-W Board member Andrea Danyluk (Williams College) coordinated our tables and recruited our 26 talented mentors. Mentors included graduate students who have participated in CRA-W programs previously, as well as speakers from our other sessions; the forum provides a fun way for more women to share their experiences with others. Table mentors frequently tell us that these small group interactions are one of their favorite parts of the Grace Hopper Celebration.

The CRA-W track for Graduate Students focuses on helping attendees succeed in graduate school with three sessions: "Graduate School Survival Skills", presented by Jamika Burge (Smarter Balanced at UCLA) and Rachel Pottinger (University of British Columbia), "Building Your Professional Persona", presented by Patty Lopez (Intel) and Jaime Teevan (Microsoft Research), and "Building Your Professional Network" presented by Elizabeth Bautista (Lawrence Berkeley National Lab) and Raquell Holmes (Boston University). These sessions are consistently popular at Grace Hopper, as illustrated by over 200 attendees in each session this year.

Women in Computing

by A.J. Brush, Microsoft Research, CRA-W Co-Chair

CRA-W sessions for Early Career Faculty began with “Finding Your Dream Job”, presented by Jaeyeon Jung (Microsoft Research) and Lana Yarosh (University of Minnesota). Gillian Hayes (UC-Irvine) and Susan Rodger (Duke University) then discussed “Starting, Managing and Growing Your Own Research Program.” Lastly, attendees learned about “Preparing for Promotion” from speakers Kathryn McKinley (Microsoft Research) and Dilma Da Silva (Texas A & M University). “Finding Your Dream Job” always attracts a crowd, and had the most attendees once again (well over 200 this year). CRA-W sessions for mid-senior level faculty started with a discussion of Successful Leadership by Lori Pollock (University of Delaware) and Kathryn McKinley (Microsoft Research). Deb Agarwal (Lawrence Berkeley National Laboratory) and Nancy Amato (Texas A & M University) then discussed “Managing Up”, and the day ended with an interactive session devoted to attendee-chosen Career Mentoring Topics organized by Susan Rodger (Duke University).

Other content organized by CRA-W Board members at this year’s Grace Hopper Celebration included a panel entitled “Prof or Prez: Choosing Your Panel” organized and moderated by Andrea Danyluk (Williams College) that highlighted the range of career possibilities for Senior Academics with four accomplished women panelists: Fran Berman (Rensselaer Polytechnic Institute), Jan Cuny (National Science Foundation), Maria Klawe (Harvey Mudd College), and Mary Lou Soffa (University of Virginia). The “Visibility Everywhere: Building Web/Social Media Presence for Women in Computing” panel organized by Susan Rodger (Duke University) covered how to maintain your personal web presence and also covered the CRA-W and Anita Borg Institute project to write Wikipedia pages for Notable Women in Computing. Ruthe Farmer (NCWIT) moderated the panel; panelists included Susan Rodger (Duke University), Tracy Camp (Colorado School of Mines), Patty Lopez (Intel), and A.J. Brush. Lastly, several posters from the CRA-W Collaborative Research Experience for Undergraduates (CREU) program were presented in the Wednesday evening poster session.

Terrific CRA staff members Erik Russell, Ama Nyame-Mensah, and Heather Wright, with support from several CRA-W Board members, ensured our CRA-W booth in the very busy exhibition hall was always fully staffed. We kept busy answering questions and encouraging folks to participate in CRA-W programs. All in all, it was a busy and eventful conference. We look forward to Grace Hopper 2015 in Houston, Texas.

Slides from CRA-W sessions are available at <http://www.cra-w.org>. The ABI Grace Hopper wiki includes notes taken by attendees on many sessions.

This article originally appeared in the Computing Research News, 26(10), Nov. 2014.



Chaitrali Amrutkar
Grad Cohort 2010

I completed my PhD in Computer Science at Georgia Institute of Technology, where my research focused on securing web browsing on mobile devices. After my PhD, I founded a startup where we built software to enrich the shopping experience on mobile devices (click2shopapp.com). The startup experience taught me how to build software from scratch and market ideas. I am currently a software engineer in the Google Chromecast team.



Bushra Anjum
*Grad Cohort 2012, DSW:
N2Women 2012, CMW
SIGCSE 2012*

I am an Assistant Professor in the CS Department at Missouri University of Science & Technology and I am leading recruitment and retention activities for female students. I secured funding from CRA-W to host a Distinguished Lecturer (Dr. Patricia Lopez), and introduced the Richard Tapia Diversity in Computing Conference to my department. I also represented my department at the 2015 NCWIT Aspirations Award Ceremony.



Monika Bialy
Grad Cohort 2014

I received my Masters in Software Engineering at McMaster University, and decided to pursue a PhD in Software Engineering. I was selected as the departmental delegate for the Womensphere’s 2014 Emerging Leaders Global Summit in NY, and was awarded the Faculty of Engineering’s Women in Engineering Travel Award, with which I plan to attend Grace Hopper 2015. In my spare time, I volunteer with a nonprofit, mentoring women who are learning to code.

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From Graduate Student to Fellow: Research Community,

Every computer science graduate student learns early in their career which publication venues best match their research interests and where the best work in their area is appearing. Every year, you should endeavor to submit, attend, network, and read the papers in these venues. For example, because I work in programming language design and implementation, I regularly read, attend, and submit to the Programming Language Design and Implementation (PLDI) conference and the Symposium on Architectural Support for Programming Languages and Operating Systems (ASPLOS). These activities build research expertise, expose you to new ideas and methodologies, help you focus your research efforts on important problems, and integrate you into your research community.

Another aspect of community, sometimes overlooked, is joining the Computer Science Professional Societies (AAAI, ACM, IEEE, and USENIX). Student benefits include reduced conference registration fees, preference when applying for conference travel grants, and digital library access to publications, tutorials, and other resources. As your career progresses, professional societies offer a variety of community, leadership, and recognition opportunities.

Community Leadership

As a young or senior professional, you have the opportunity to shape your research community. For example, you can serve on program committees, help organize conferences and workshops, and become a Special Interest Group officer. In these roles, you can influence the research directions, standards, and culture of your community. For instance, when I was elected and served on the SIGPLAN Executive Committee (1999-2001), I initiated *20 Years of the ACM SIGPLAN Conference on Programming Language Design and Implementation 1979-1999: A Selection* to improve scholarship in my community. As program chair of ASPLOS, I instituted double-blind reviewing to reduce bias. Dr. Sarita Adve, the 2014 ASPLOS Program Chair, improved community scholarship by instituting a no page limit on references policy, which is quickly being adapted in Architecture, Programming Language, and Systems' conferences. By taking on these roles, you have an opportunity to improve your community. Research is a social process. The community needs your great research ideas and your service.

Community Recognition

Your community supports you in your career by recognizing your accomplishments. For instance, AAAI, ACM, and IEEE all recognize member contributions to research, education, and service with membership levels and awards. This recognition is easy for your manager, department chair, deans, and other administrators to understand. Research and service recognition help build social capital in your institution, your research community, and the broader computer science community, serving as independent validation. You cannot apply, but may receive some awards, such as test-of-time paper awards. What you can control is executing and communicating your research on critical problems as well as possible. Furthermore, for membership level recognition, you need to take initiative and apply yourself or ask one of your advocates to nominate you, as appropriate to your career stage and accomplishments.

Membership levels include Senior Member (AAAI, ACM, IEEE), Distinguished Members (ACM), and Fellow (AAAI, ACM, IEEE). For example, AAAI, IEEE, and ACM Senior Members need 10 or more years of professional experience, including graduate school. Both AAAI and ACM Senior Member in addition require 5 years of continuous society membership for this recognition and other awards. Do not let your membership lapse as you make your transition from student to professional!



If you are an Assistant Professor, there is no better time to apply for Senior Member than one or two years before you go up for tenure. You need senior people in your field to write strong letters of

Membership Levels & Recognition

by Kathryn S. McKinley, Microsoft Research

support for you. As you or your students give talks at conferences, Universities, and other venues, write down senior members of your community who attend the talks, comment positively on the work, and otherwise provide strong evidence that they actually read your work and admire it. No kind word should go unnoted!

Senior member letters are easy to write because they are short. Writing a short assessment of your accomplishments will help prepare a potential letter writer to write a more detailed letter for your tenure case. If you miss the before tenure time frame, apply immediately afterward, since earning tenure is a very good indicator that you are qualified for Senior Member. Furthermore, it will be easy for tenure letter writers to repurpose their comments.

If you are in industry at the 10 year mark (including grad school years), refreshing your professional network on your work is an activity you may have neglected. To assess if you are qualified, look at the publications, citations, patents, industry impact, and other accomplishments for recently elected members in your area. If your record is similar, apply! Regardless of your position, preparing a comprehensive CV, positioning your work in a larger context, and communicating with senior members of your community helps you and others reflect on your contributions.

Choosing a good time to apply for ACM Distinguished Member or Fellow of AAAI, the ACM, and IEEE is more difficult. The ACM Distinguished Member grade requires 15 years of professional experience and 5 years continuous ACM membership. AAAI, ACM, and IEEE Fellows require outstanding contributions and impact: AAAI seeks Fellows that have made significant sustained contributions; ACM Fellows are intended to capture the top one percent of the field; IEEE Fellows have outstanding contributions and the number awarded each year cannot exceed one-tenth of one percent of the total voting membership. Compare your record to recent Distinguished Members and Fellows in your area by examining their publications, citations, service leadership, patents, and impact on industry. For example, Fellows often have highly cited papers that moved the field in new directions; test-of-time awards; technical leadership of conferences; membership on NSF, DARPA, or other science advisory committees; and/or highly successful products in industry. However, unique contributions are rewarded as well.

If you think you may be qualified, consult with a couple of trusted advocates who are Fellows, such as your department chair, for advice if the time is ripe. For these nominations, you will need a nominator, who submits the materials, coordinates the nomination, and asks for letters of support. Someone outside your institution in your research area is perceived as more independent. I recommend conferring on a list of potential supporters with your nominator. You will have insight on which researchers know and appreciate your work the best. However, the nominator should email privately to ask for letters of support. You, the nominee, should definitely draft the statement of contributions, since you know your work best. A good nominator will have experience writing and reading such statements, and should help polish the statement. The statement of contributions should be written for a broad audience, since the selection committee members won't necessarily have expertise in your area. Don't be discouraged if you are not selected the first time; many current Distinguished Members and Fellows had this same experience. Regardless of the outcome, remember that your nominator and letter writers think your work is outstanding. Thank them for their time and efforts on your behalf.

Along the way

Contribute to your community. For example, serve on program committees, initiate community research activities, meet and mentor junior members of your community, nominate others for awards, serve on awards committees, thank and recognize others. With your research and service, help create a thriving and inclusive research community that you enjoy and that enriches your technical life.

A version of this article appeared in the ACM-W newsletter, Nov 2014.



Kathryn McKinley

Highlight on Alum **Beth Trushkowsky** (continued)

interviewed by Carla Ellis, Duke University

How did you become interested in pursuing a career in computer science?

My excitement about computer science actually started before college with web design. I really enjoyed learning how the web worked and figuring out how to use HTML, stylesheets, and eventually JavaScript, to develop my own web sites. These initial experiences cultivated my interest in programming and ultimately a fascination with database systems. As an undergraduate, I felt that my computer science courses never ceased to amaze and inspire me. At its core, computer science is about problem solving and experimentation. For me, the ability to try things out as I learned about them was, and continues to be, very exciting.

How did your CREU experience influence your career path?

Participating in CREU while I was at Duke gave me a first taste of the many aspects of research that are so compelling: independence, problem solving, and freedom to explore interesting challenges. Working on a research project is a much different experience than, say, working on a problem set or other homework where you are tackling problems with known solutions. Research allows you to push your knowledge to new discoveries and applications. My CREU experience made me realize that I really enjoyed these aspects of research, and gave me more confidence to pursue it. I believe my time doing undergraduate research influenced my decision to pursue graduate studies and eventually become a professor.

Do you have any insight to share with undergraduates who might want to give research a try but don't know how to start?

I think it is important to talk with professors and fellow students to see what projects are out there. You could start by approaching professors who taught a class you enjoyed. I would also recommend trying to do research with professors with whom you think you would like to work; a first experience with research should be about learning how to do research in a supportive and encouraging environment, rather than discovering what specific subarea of computing you want to focus on longer-term.

Once you have gotten started, realize that it's okay if you don't already know the answer, that's the point! And, if you have

a chance to do multiple research experiences, try exploring opportunities on different projects

When did you decide to pursue an academic career in computer science? What do you enjoy most about being a faculty member?

About halfway through graduate school I realized I did not want to be a software engineer when I was finished. Part of that decision was due to having gotten used to the freedom and flexibility of the academic lifestyle—I only like working on problems that I want to be working on! For me, the choice was between joining a research lab, becoming a professor at a research-focused institution, or becoming a professor at a teaching-focused institution. I knew I wanted to work with students, and ultimately decided that I wanted to teach at an undergraduate college.



Dinner with W-ACM Harvey Mudd College students and professors

At Harvey Mudd, I am fortunate to be able to work with students on many fronts: in the classroom, as an advisor for senior project teams, and on summer research projects. My favorite aspect of the job is definitely the people. I enjoy building relationships with students. I also appreciate that life as a faculty member provides so much flexibility to continue exploring new areas of computer science. For example, teaching a new course is an opportunity to learn a new topic!

What made you decide on your specific research area? Tell us a bit about what excites you most about your current research.

My interest in database systems began in college, and I chose to pursue that area for research during graduate school. For me, database systems hit the sweet spot between systems

and theory—cool algorithms that drive powerful and practical applications. When I was in graduate school, I became interested in the idea of compute resources as a service, such as Amazon's elastic cloud computing service (EC2). I really liked the notion of acquiring these resources on-demand, scaling their usage up or down as the need for compute power fluctuates.

More recently, I have been excited by another type of elastic resources: people! Micro-task labor markets, like Amazon's Mechanical Turk, provide a programmatic interface for asking other humans, i.e., crowds, to do small units of work, such as verify a business's address or tag a photo. This programmatic interface provides an opportunity to incorporate human computation into software alongside machine computation. My particular interest has been combining human and machine computation to explore hybrid query processing systems. People can help the database system answer queries it would otherwise have difficulty with, e.g., predicates with subjective comparisons or to gather additional data using real-world knowledge and experience. An existing challenge is how to combine humans and machines in a cost-effective way to answer a given query, where cost may include both monetary cost to pay crowd workers and processing time, as well as other factors. Finding a low-cost strategy to execute a query is the role of the query optimizer in a traditional database system, and I am very interested in thinking about what an optimizer would look like in a hybrid human/machine system.

What are your future plans (over the next 5 years)?

Hopefully to get tenure! I think along that path a number of goals excite me. In the teaching arena, I hope to build out my repertoire of database and data-related courses that I offer, touching on important topics like data science and distributed/parallel computation. I'm also excited to work with students doing summer research to tackle the query optimization challenge for hybrid human/machine query processing systems. Additionally, I aim to continue with the diversity efforts at Harvey Mudd, which includes bringing students to the Tapia conference on diversity in computing.

Have you experienced any particular challenges and/or opportunities as a member of an underrepresented group?

I am glad there are mentorship opportunities for underrepresented groups, which I have taken advantage of at various points during my path through academia. These opportunities are wonderful for feeling less isolated and boosting confidence. I think at times my membership in underrepresented groups causes my imposter

syndrome to kick in, for example if I receive a scholarship or award—it's easy to doubt whether I actually deserved it, or if I received it only due to my minority status. Having a great support network helps allay these doubts.

Are you involved in other activities that support women and minorities in computing?

I have attended the Tapia conference on diversity in computing most years since I began graduate school, and hope to continue that tradition. During my first year at Harvey Mudd, another professor and I were thrilled to bring eight students with us to the Tapia conference. That same school year, we also attended the Grace Hopper conference and brought forty students with us! These have been awesome experiences and I am so glad to have found a place that has such a commitment to supporting diversity. Harvey Mudd also has an ACM-W group that has dinner at professors' residences several times a semester, which is a really nice bonding experience for the Mudd community.

What do you do for fun and how do you balance life outside of work with your career objectives?

I really enjoy traveling and trying new restaurants and cuisines. I tend to be a "food tourist" when I travel, i.e., planning an itinerary around all the places I want to eat! More recently, I have started trying to cook interesting food at home. Since living in California, I have gotten more into outdoor activities like hiking. I also like playing tennis, although my skill level leaves much to be desired.



Visiting the Art Garden at the Israel Museum (Jerusalem, Israel)

As a new faculty member, I am still trying to find the balance! I have found that scheduling activities or outings with friends and family is a great forcing function. I have also set aside some "me" time each day when I

can do things such as read a book before bed. I have a great set of colleagues at Harvey Mudd, so we plan lunches and happy hour gatherings periodically. That helps with the balance as well.

AlumNews (continued)



Iva Bojic

DSW: Networking 2014

I am a Fulbright Postdoctoral Scholar at the MIT Senseable City Lab. Recently, I got funding from the Fulbright Outreach Lecturing Fund that allowed me to visit Puerto Rico and deliver three talks at three different universities in a single day! I am positive that one of the greatest outcomes of my lectures was the fact that students became more aware of the importance of multidisciplinary. In January, with Zoya Bylinskii, I co-initiated an MIT CS visit day to support the “50/50 by 2020” initiative.



Aparna Chandramowliswaran

Grad Cohort 2009, 2010

I recently joined the faculty at the University of California, Irvine as an Assistant Professor in the department of Electrical Engineering and Computer Science. My research is broadly in the area of high-performance computing and addresses key challenges in developing parallel algorithms and software. Prior to joining UCI I spent two years as a research scientist at MIT in the compilers group. I received my PhD in Computational Science and Engineering from Georgia Institute of Technology, supported by an Intel PhD fellowship.



Amal Fahad

Grad Cohort 2008, 2009

I successfully defended my PhD thesis in September 2014. I now work at Microsoft as a Software Developer Engineer in the Operating System Group. Recently, I attended the 2nd annual Heidelberg Laureate Forum in Germany. When I was there, I was interviewed about education in developing regions and the problems that women face there. The interview appears in the Scientific American blog, 2015/01/12 and 2015/01/19.



Anna Gainaru

Grad Cohort 2011

I am in my fourth year as a Ph.D candidate in Computer Science at the University of Illinois at Urbana-Champaign. I will defend my thesis in May. My research focuses on analyzing the faults and failures in current high performance computing systems and offering ways of mitigating their effects at the application level for future exascale machines. Recently I received a special prize

for excellence for my PhD work at the Gala of Romanian Students Abroad, a prize judged by the Romanian Academy. At the end of 2014 I was part of a team that won the Intel Parallel Universe Coding Competition at the biggest HPC conference in the US.



Heidi Khlaaf

DREU 2010, DSW SIGPLAN 2012

In May 2012, I became the first undergraduate Research Intern at Microsoft Research Cambridge. I received a BSc in Computer Science and Philosophy with a minor in Mathematics in December 2012. I was awarded a National Science Foundation Graduate Research Fellowship. While pursuing my PhD in Computer Science at University College London, I contracted with Microsoft Research Cambridge as part of the T2 research project, which aims to build a high-performance automatic program verification tool. I hope to continue my research path in the realm of formal verification.



Bryn Reinstadler

DREU 2012

I am the happy recipient of the Herchel Smith Fellowship to study Computational Chemistry at Cambridge University in the UK for the next two years, fully funded. As a senior about to graduate from Williams College in Williamstown, Massachusetts, I'm excited for the opportunity to meld my interests in chemistry with my interests in computing. Furthermore, I'm excited to be the first woman in my family to attend graduate school! I hope to use the skills that I learn during this Fellowship to come back to the States and help other women in my position: First-generation graduate students in fields where women are the minority.



Vijayalakshmi Saravanan

DSW: N2Women 2010

I am an Assistant Professor (Senior) at the School of Information Technology and Engineering at Vellore Institute of Technology, India and a Visiting Researcher at Ryerson University, Canada. I recently earned my Ph.D. from VIT University; I carried out my research at Malardalen University, Sweden under an Erasmus Mundus Fellowship and at Ryerson University as an exchange doctoral student in the area of computer architecture. My research interests are power-performance analysis of multicore processor architecture..

Ann Quiroz Gates Wins Nico Habermann Award (cont.)

She is perhaps best known for leading the Computing Alliance of Hispanic-Serving Institutions (CAHSI), an alliance of 13 institutions whose work has had large and sustained positive impact on recruitment, retention, and advancement of Hispanics in computing. Mentoring is a key component of CAHSI's approach, which builds support networks that address both academic and cultural issues for students at all stages of their college and postgraduate education and on to leadership positions. Ann helped establish the Affinity Research Group (ARG) model for research mentoring and peer support; the evaluation of its effectiveness and dissemination of the findings has led to its adoption at institutions outside of CAHSI.

Through an NSF ADVANCE program, Ann has also promoted the recruitment, retention, and advancement of female faculty at her home institution, UTEP.

Ann has greatly enabled the success of many students through her personal mentoring of over 150 Hispanic students and research supervision of over 70 students. Ann's influence has extended to other initiatives and communities, including the Society for Advancement of Hispanics/Chicanos and Native Americans in Science (SACNAS), CMD-IT, and the AccessComputing Alliance. The scale and impact of Ann's contributions is truly exceptional, particularly in support of Hispanics who account for 25% of the U.S. population, but less than 7% of bachelors degrees in computing and less than 2% of PhDs.

Ann has attended CRA-W's CAPP workshop (now known as CMW) and been involved as a speaker in the Grad Cohort workshop.

Thank You to Our Individual Donors

CRA-W wants to show our appreciation to the individuals who generously responded to our year-end fund-raising appeals, bringing in \$10,415.

Sponsors (\$750+)

Kathleen Fisher, Janie Irwin, Kathryn S McKinley & Scotty Strahan

Friends (\$250-749)

Sara Sprenkle, Dilma Da Silva, Andrea Danyluk, Carla Ellis, Julia & Daniel Hirschberg, Lori Clarke and Leon Osterweil, Leah Jamieson

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Contributors

Pallavi Meharia, Iris Bahar

There were also 16 donors who wished to remain anonymous but together contributed over \$3200. Thank you everyone!

CRA-W Alums Named Fellows of ACM and IEEE

The IEEE and ACM, two of the major professional societies dedicated to scientific and technological innovation, including advancements in computing, have recently named several women who have been active in CRA-W programs as new Fellows of their organizations. We extend our congratulations!

ACM Fellows

The ACM has recognized 47 of its members as Fellows for their contributions to computing that are driving innovations across multiple domains and disciplines.



Lori Faith Cranor

Carnegie Mellon University

Recognized for contributions to research and education in usable privacy and security. She has participated in CRA-W as a DREU mentor and in the CAPP (now CMW) workshop.



Faith Ellen

University of Toronto

Recognized for contributions to data structures, and the theory of distributed and parallel computing. Faith is a former CRA-W board member.



Juliana Freire

New York University

Recognized for contributions to provenance management research and technology, and computational reproducibility. She attended an early Career Mentoring Workshop.



Valerie King

University of Victoria

Recognized for contributions to randomized algorithms, especially dynamic graph algorithms and fault tolerant distributed computing. Valerie has served as a CREU mentor.

IEEE Fellows

IEEE Fellow is a distinction reserved for select IEEE members whose extraordinary accomplishments in any of the IEEE fields of interest are deemed fitting of this prestigious membership level.



Stephanie Forrest

University of New Mexico

Recognized for contributions to computer security systems based on biological principles. She has participated in the CAPP (now CMW) workshop.



Ling Liu

Georgia Institute of Technology

Recognized for contributions to scalable Internet data management and decentralized trust management. She has participated in a Discipline Specific Workshop.



Diana Marculescu

Carnegie Mellon University

Recognized for contributions to design and optimization of energy-aware computing systems. She has participated in the Career Mentoring Workshop, Discipline Specific Workshop (DREU), and served as a DREU mentor.



Yuanyuan Zhou

University of California, San Diego

Recognized for contributions to scalable algorithms and tools for computer reliability. YY is a former board member of CRA-W and winner of the Borg Early Career Award in 2005. She has participated in several DSWs, CMWs, and served as a DREU mentor.

About CRA-W

CRA-W Board Members

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Mary Lou Soffa, University of Virginia

CRA-W is an action-oriented committee of the Computing Research Association dedicated to increasing the access, retention, and advancement of women in computer science and engineering research and education, including undergraduate and graduate students, faculty, and industry and government research labs. See more about CRA-W and its activities at <http://www.cra-w.org>.

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CRA-W encourages individual contributions from alums of our programs and other CRA-W friends. Because CRA-W programs have touched so many lives, this initiative is an outlet for alums and friends to make contributions toward reaching the next generation of women computer scientists and engineers. To donate to CRA-W, visit <http://www.cra.org/crawgiving>.

Upcoming Events and Deadlines

Apr. 10-11: CRA-W Grad Cohort Workshop - San Francisco, CA

May 18: Application deadline for 2015-16 CREU

May 18-19: DSW - GREPSEC II - San Jose, CA

May 19-21: NCWIT Summit - Hilton Head, SC

May 26-27: DSW - ICRA 2015 - Seattle, WA

Jun. 13-14: Early Career Mentoring Workshop-L/R at FCRC 2015 - Portland, OR

Mid Career Mentoring Workshop-E/L/R at FCRC 2015 - Portland, OR

Jun. 15: Proposal deadline for Discipline Specific Workshop program

Rolling: CRA-W/CDC Distinguished Lecture Series program

Nomination Opportunities

May 1, 2015 Anita Borg Institute ABIE awards: Denice Denton Emerging Leader Award, Social Impact Award, Technical Leadership Award, A. Richard Newton Educator Award, Change Agent Award anitaborg.org/awards-grants/grace-hopper-celebration-abie-awards/

May 1, 2015 USENIX: Flame award, LISA outstanding achievement award, Software tools award www.usenix.org/about/usenix-awards

July 1, 2015 IEEE Computer Society: Ramakrishna Rau Award, Sidney Fernbach Award, Ken Kennedy Award, Seymour Cray Award www.computer.org/web/awards/nominate

Sept 10, 2015 ACM Fellow nominations awards.acm.org/fellow/

Oct. 15, 2015 IEEE Computer Society: Entrepreneur Award, Pioneer awards, Tsutomu Kanai Award, Harry H. Goode Memorial Award, Hans Karlsson Standards Award, W. Wallace McDowell Award, Taylor Booth Education Award, Harlan Mills Award, Undergrad Education Award, Watts S. Humphrey Software Process Achievement Award, Richard E Merwin Distinguished Service Award, Public Service in pre-college environment, Technical Achievement Award www.computer.org/web/awards/nominate

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CRA-Women



CRA-W

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Women

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