

CIS: Celebrate, Inform, Support

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Inside this Issue

From the Chair1
Spotlight on Barbara J. Grosz2
Projects Spotlight 5 First all-woman team reaches Imagine Cup Finals
ACM Distinguished Speakers in China
Awards
Communities
ACM-W Ambassador Blog15 Updates from Turkey, Australia & Canada
Ada Lovelace Tributes 18 Sandy's story
Comic: Ada Lovelace Origins
Dates & Deadlines22

from the Chair By Elaine Weyuker

I hope that everyone's summer is going well. This has been a very busy spring and summer for ACM-W with many exciting new events and programs.

In this issue we highlight another of the ACM-W Executive Board members, Barbara Grosz, who was awarded the ACM/AAAI Allen Newell Award at this



year's ACM Award Banquet. Her interview will give you some insights into this extraordinary woman and why we are so pleased to have her working with us.

One of our goals is to expand our impact internationally. In this issue, we have reports from three of our International Ambassadors, and an announcement of a presentation at the upcoming Hopper conference at which three ACM-W Ambassadors will present information about international programs that are working to change perceptions about IT courses and careers.

There is also a report about a recent ACM-W regional conference, news about members of one of our student chapters, and news of recent awards, and much more. This issue is guaranteed to be a real page-turner (or page-scroller)!





Barbara J. Grosz at her decanal residence at the Radcliffe Institute for Advanced Study at Harvard University.

Photo by Kathleen Dooher

Spotlight On Barbara J. Grosz

Barbara J. Grosz is Higgins Professor of Natural Sciences at the Harvard School of Engineering and Applied Sciences (SEAS) and dean of the Radcliffe Institute for Advanced Study at Harvard University. Recently she was awarded the Allen Newell Award from the Association for Computing Machinery (ACM)/Association for the Advancement of Artificial Intelligence (AAAI). (see Awards this issue)

Grosz was recognized for her contributions to natural language processing, the study of the basic structures and processes by which people use natural languages to communicate, and her more recent research on the development of multi-agent systems, "smart" and adaptable computer algorithms that collaborate with each other or with their human users.

She is also a member of the ACMW Council Executive Board (see Volume 1, Issue 4). I interviewed Dr Grosz by email on June 30, 2009.

BAB: Tell a little bit about how and why you got into a computing career.

BJG: I got into computing entirely by accident. My seventh-grade math teacher, who taught binary arithmetic (among other more ordinary topics), was the first person to tell me that girls *could* do math. My fond memories of that middle school class and its section on binary arithmetic led me to audit a Cornell University computer science course wonderfully taught by John Hopcroft. That course heightened my interest in computing, as did working for IBM one summer during college, and eventually led to my going to graduate school in computer science.

I gravitated to my initial research area because of a shared conviction with Alan Kay that educational software systems could be far better than they were. Working with Alan on his Smalltalk language development project in the early 1970s convinced me of the vast potential in the intriguing field of natural-language processing.

BAB: What's going on with your research these days that's new and promising?

BJG: Two of my current projects illustrate the wonderful interplay between theory and application, as well as the role of empirical investigations. S-CASTS, supported by NSF grant REC-0632544, addresses the challenging problem of a computer system that infers the strategies of middle-school students who are using datamodeling software to learn about statistical data by building and analyzing their own models. Our system design draws on earlier work on the SharedPlans model of collaboration (Grosz & Kraus, 1996, 1999), and the collaborative interface uses even earlier theoretical work on the structure of discourse (Grosz & Sidner, 1986). We empirically evaluated our plan recognition algorithms





Barbara Grosz uses a multiagent test bed called CT to discuss electronic interruptions during a lecture titled, "Can't You See I'm Busy? Computers That Know When To Interrupt."

Photo by Tony Rinaldo

using data collected with colleagues who develop middle school curricula and educational software. Currently, we're exploring the extension of these ideas to the development of a collaborative interface to software for teaching chemistry through laboratory simulations.

The second project, decision making for collaborative tasks (supported by NSF grant IIS-0705406), focuses on the design of computer-agent strategies for deciding whether and when to help teammates in a collaborative activity. It's a step in a longer-term research effort aimed at improving computer agents' decisionmaking when they work in groups with people. This work also draws on SharedPlans, merging that logical specification with a decisiontheoretic mechanism, which can reason about costs and benefits, to provide a novel hybrid model and a new probabilistic representation that enables the compact representation of agents' beliefs about each other's "recipes" for doing complex activities. We have tested our new techniques using a multi-agent test bed called CT (http://www.eecs.harvard.edu/ai/ct). One of the postdoctoral fellows who have worked on this project is now using CT to study decision making in different cultures and societies. This demonstrates the wide applicability of computer science research that is rooted in theory and takes human cognitive capacities into account. It's also evidence of the wonderful rewards of being a professor whose students inventively tackle challenging problems using new computational mechanisms.

Although being dean of Radcliffe leaves me less time for research, it, too, has rich rewards and indirectly influences my research. It is a superb culmination of years spent designing and leading major interdisciplinary initiatives, including the Natural Language Program at SRI International and the Center for the Study of Language and Information—a joint venture of Stanford University, SRI International, and Xerox PARC—which I cofounded. Radcliffe annually brings together forty to fifty fellows from a wide array of academic and artistic fields; the fellows themselves say their presentations and cross-disciplinary conversations are an "intellectual feast." I'm also very excited about Radcliffe's faculty-led academic engagement programs, which continually engender new and promising collaborations and research endeavors.

BAB: With all of the research, awards and travel in your life, what are you doing for fun? And how do you find time for it?

BJG: I love gardening, watching movies, hiking in Yosemite, and cooking for dinners with friends (and baking chocolate chip cookies for their kids and my nephews).

How do I make time for it? I just do. However challenging it may be, we must simply make time for fun. Getting away is important for gaining perspective and new insights. Those who need a work-related incentive to do so should note that Radcliffe Institute fellows often report that answers to some of their most complex



problems emerge in moments of relaxation and deliberate mental shifts away from their research.

BAB: The proportion of women in computing has been decreasing for some time. How do you respond to critics who say that this is a natural course of events and that it is unproductive to push women into technical fields?

BJG: I say that they're wrong...completely. Computing is where the action is. It's the way of the future and it brings much to bear on many fields. There's absolutely no reason why women shouldn't be as excited as men about the incredible potential for innovation in computer science, and they're certainly as capable. The declining proportion of women in computing is an unfortunate trend that we must work relentlessly to reverse--we cannot possibly produce the best computing if half of the human race is absent from the design process.

BAB: You've achieved a significant amount as a woman in computing. What advice do you have for young women in computing, on overcoming obstacles like culture and distance to become leaders?

BJG: Listen to those who encourage you and ignore those who don't. Track down people who can be resources and don't tire of asking them questions. There are numerous outstanding people in computing. Find people like Allen Newell and Elaine Weyuker and go where they are to study and work.

It's also important to take charge. Grace Hopper is often quoted as saying, "If it's a good idea, go ahead and do it. It's much easier to apologize than it is to get permission." That's excellent advice for young women in computing. Just go for it!

One of the many rewards of being dean of Radcliffe: Barbara Grosz presents former US Supreme Court Justice Sandra Day O'Connor with the Radcliffe Institute Medal.

Photo by Tony Rinaldo







Projects Spotlight

First all-woman team to reach Imagine Cup Finals

"Microsoft, a company always interested in young software developers, likes to encourage them to tackle real-world problems," writes the Chronicle of Higher Education's Josh Fischman. "That's the goal of its worldwide student competition, the Imagine Cup, and the U.S. winners were announced earlier this month ... The first runner-up was also the first all-women team to reach the finals in the cup's seven-year history. From DePauw University, Team MangoBunnies developed software that helps HIV and AIDS patients by sending medication schedules and instructions directly to their smartphones or PDA's. It also retrieves information about user history."

(http://chronicle.com/wiredcampus/index.php?id=3756)

DePauw University students Erin Donahue and Ashley Myers and their team, "MangoBunnies," received the first runner-up prize in the U.S. finals of Imagine Cup, Microsoft Corp.'s annual global student technology competition. Donahue, a DePauw senior, and Myers, who is a junior, are joined on the MangoBunnies team by Malisa Vongskul, a student at Indiana University - Purdue University at Indianapolis (IUPUI). They win their choice of \$4,000 cash or \$8,000 towards a National Collegiate Inventor and Innovator's Alliance e-team grant for further development of their project.

The first all-female team to advance to the finals of the competition, MangoBunnies created a software application, called Computer-Assisted Medication Regimen Adherence (CAMRA), to

assist HIV/AIDS patients who must

undergo complex medication regimens. The software works like an alarm system: a patient can enter his or her medications -- which can number in the dozens -- on a schedule in his or her phone. When the time comes to take the medication, the phone rings or vibrates. It's a simple, yet effective solution to regimen adherence made possible by the ubiquitousness of mobile technology.

Imagine Cup inspires students to use their creativity to help change the world for the better by discovering new ways to use technology to address real-world issues. This year's theme centers on the United Nations' eight Millennium Development Goals, which

outline some of the hardest challenges in the world today, such as fighting hunger and poverty and eradicating AIDS, as well as



l-r: Vongskul, Donahue and Myers at the competition on Sunday



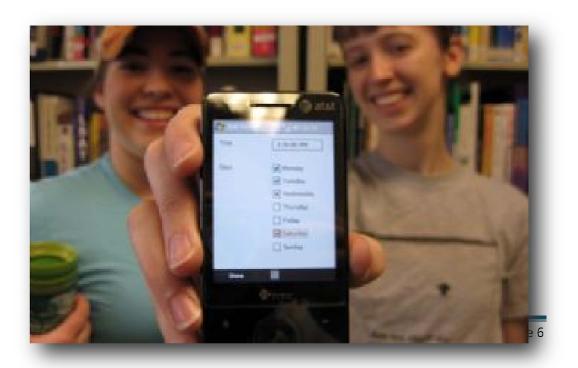
improving education, maternal health and environmental sustainability.



Jon Roskill, VP of business & marketing organization at Microsoft Corp., congratulates Team MangoBunnies on their advancement into the second round of the Imagine Cup 2009 U.S. Finals

Gloria Childress Townsend, the DePauw ACM-W Student Chapter Sponsor, writes that all three women belonged to the ACM-W student chapter, before Malisa transferred to IUPUI. Erin and Ashley chaired the organization the last two years. "The women's success demonstrates the power of our national-level organizations for women in computing. Among other features, the organizations build confidence, provide structure for women to gain experience with presentation and research skills and learn about opportunities for participation. All three women participated in the last Indiana Celebration of Women in Computing (INWIC), giving a robotics workshop, a poster and two Lightning Talks. (INWIC is an instance of the ACM-W project, Small Regional Celebrations of Women in Computing.)

Erin and Ashley attended the 2009 Grace Hopper Celebration of Women in Computing (GHC09), where they served as twitterers and filmed interviews for YouTube, while soaking up the GHC atmosphere that convinces so many young women that they are members of the Computing Clubhouse and can and should enjoy all privileges of the membership. A local ACM-W chapter meeting last fall provided information to the women about Imagine Cup. The partnership of GHC, Student ACM-W Chapters and Small Regional Celebrations demonstrates (by the three students' success) the strength and influence of an alliance of projects and organizations to change the lives of women in computing."







ACM Distinguished Speakers Panel in China on Emerging Technologies in Computing

The Distinguished Speakers Program is an ACM outreach initiative that brings distinguished speakers from academia, industry, and government to give presentations to ACM chapters, members, and the greater IT community in a variety of venues and formats. The program offers live talks by DSP speakers at student or professional chapter gatherings, and guest speakers at conferences or other events.

Three prominent researchers in the United States recently returned from a speaking tour in China, sponsored by the Distinguished Speakers program at ACM in order to highlight a new ACM office in China.

Tracy Camp (ACM-W Council Member and Professor at the Colorado School of Mines) was one of the Distinguished Speakers asked to participate in the tour. The other two speakers were Fran Berman (Professor and Endowed Chair at the University of California, San Diego, and Director of the San Diego Supercomputer Center) and Justine Cassell (AT&T Professor of Communication and Computer Science at Northwestern University). These three inspiring ladies visited three universities on their tour: Tsinghua University in Beijing, Huazhong University of Science and Technology in Wuhan, and South China University of Technology in Guangzhou. The number of attendees in the audience at each university ranged from 100 to 180.

On each stop of the tour, Dr. Camp first gave a brief presentation about the mission of ACM, and then a presentation on the emerging field of wireless sensor networks; her talk was entitled *Wireless Sensor Networks: Motivation, Progress, and Challenges.* Next, Dr. Berman discussed how the information age has brought with it a deluge of digital data; her talk was entitled *Mobilizing the Data Deluge.* Last, Dr. Cassell explored the ways that people interact with virtual humans; her talk was entitled *Emerging Technologies for Virtual Humans.*

The experience of this trip to China has provided all three speakers with lifelong memories. To hear more about this distinctive speaking tour, watch for an upcoming podcast that the speakers have taped.





This podcast will be available soon from the ACM web site.



Awards & Recognitions

ACM Awards Recognize Innovators in Computer Science

ACM has announced the winners of prestigious awards honoring innovations in computing technology that benefit society through their profound impact on the way we live and work..

Barbara Grosz received the ACM/AAAI AIIen Newell Award Barbara Grosz's contributions to natural language processing center around the nature of discourse structure in language. Her research shows how discourse has identifiable structure at least as rich as that found at the sentence level, demonstrating the influence of discourse structure on such varied phenomena as forms of reference, intonational patterns, syntactic form, and cue-phrase selection. Within the area of multi-agent systems, Professor Grosz's research centers around the development of conceptual and architectural constructs that support joint action in multi-agent collaboration. She has contributed theoretical results as well as implemented systems, such as Colored Trails, that have been adopted by many others for their research. This work is highly interdisciplinary, drawing on theories and results from economics, philosophy, psychology, and core computer science.

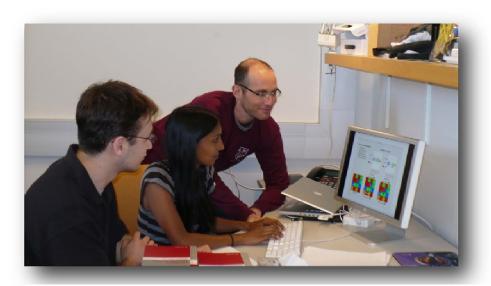
Professor Grosz has played a leadership role within the field of artificial intelligence, serving as AAAI President, IJCAI Chair, and on the governing board of AAMAS. She has also had a profound effect on interdisciplinary institutions with which she has been affiliated. She was a co-founder in 1983 of the Center for the Study of Language and Information, a joint effort of Stanford University, SRI, and Xerox PARC, which became a premier institution in the interdisciplinary

areas of computational linguistics and symbolic systems. As the first dean of science at Harvard's Radcliffe Institute for Advanced Study, Grosz developed a highly successful science program that fosters engagements with scientific communities at Harvard and attracts leading laboratory scientists as well as theorists from all scientific fields and from all parts of the world to Radcliffe's fellowship program. As dean of the Radcliffe Institute, she has been working with faculty from other Harvard schools to build multidisciplinary collaborations crossing the arts, humanities, sciences, and social sciences.



Barbara J. Grosz

Photo by Tony Rinaldo



Using CT at the Harvard School of Engineering and Applied Sciences, from left to right: undergraduate Konstantin Pozin, research assistant Swapna Reddy, and postdoctoral fellow Kobi Gal. *Photo by Rebecca Cremona*



ACM Awards Honor Significant Contributions to Computer Science

ACM also announced the winners of awards honoring significant contributions to the computing field. These awards recognize dedicated professionals whose efforts have vastly improved processor efficiency, expanded opportunities for women, and provided significantly greater access to computing research.

Susan Eggers received the 2009-2010 Athena Lecturer Award, for her work on computer architecture and experimental performance analysis has led to the development of Simultaneous Multithreading (SMT), the first commercially viable multithreaded architecture.

Telle Whitney received the Distinguished Service Award, for her profound impact on the participation of women in computing. Whitney, President and CEO of the Anita Borg Institute for Women and Technology (ABI), co-founded the Grace Hopper Celebration of Women in Computing, which has grown into a major annual event.



Recognition for ENIAC Pioneer

ENIAC Pioneer Jean Bartik, now 85, received the Computer History Museum Fellows Award. Jean Bartik was one of the first programmers of the groundbreaking ENIAC computing system in 1945. She later assisted in converting the ENIAC system into one of the first stored-program computers.

This year Bartik also received the Pioneers Award from the IEEE Computer Society for pioneering work as one of the first programmers, including co-leading the first teams of ENIAC programmers and pioneering work on BINAC and UNIVAC I.

From all of us at ACM-W, congratulations!

acm-w

Communities

Midwest Women in Computing (MidWIC)

The second Midwest Women in Computing (MidWIC) conference will take place at Saint Xavier University in Chicago on October 9-10, 2009. This event will be co-located with CCSC-MW.

This is going to be an excellent opportunity for students at both the undergraduate & graduate level to present their work in progress (through posters and standard presentation sessions); hear inspiring talks by accomplished women in both academia & industry; meet each other & network.

A website is in formation - details to follow. In the meantime, please let your students & colleagues know about this event, and especially give your students a heads-up about this excellent opportunity to share their work with others. Please share this with any appropriate listserv!!!

Any questions? Please contact Flo Appel at appel@sxu.edu

Thank you - I look forward to seeing you at MidWIC!



Michigan Celebration of Women in Computing:

We Are Computing

The second biennial Michigan Celebration of Women in Computing (MICWIC) took place April 3-4, 2009 at the Kellogg Biological Station in Hickory Corners, Michigan. The conference theme "We Are Computing" was a tribute to women who are creating, teaching, and shaping the future of computing technology.

"It is important to think of ourselves as being what computing is about," said conference chair Linda Ott, professor and chair of the computer science department at Michigan Technological University. "One of the goals of MICWIC is expanding our visions of ourselves and our opportunities in computing."

Over 125 people attended MICWIC. The conference attracted students with diverse academic backgrounds that ranged from professional writing and digital art to computer science. Professionals in industry, government, and academia came to share their insights and mentor the next generation of computing professionals. MICWIC also featured a special track for high school students and high school teachers.

The celebration began on Friday with a student poster session featuring ten different entries, including an interactive "We Are Computing" poster where conference goers could add their own bios. Birds of a Feather sessions sparked lively discussions about getting admitted to graduate school, running a successful women in computing group, preparing for an entry-level IT position, and working from home.







Saturday morning lightning talks and paper sessions highlighted student research, professional networking, Serious Game Design, physical computing, Google outreach projects, and "cool" Microsoft research. One lightning talk was a heartfelt tribute to a cherished mentor, computing pioneer Dr. Rose Carney.

Keynote speaker Vibeke Sorensen, professor and chair of media studies at University at Buffalo, The State University of New York, gave participants a thought-provoking glimpse into the intersection of computing technology and the arts. Sorensen provided examples of how technology can empower humanity to embrace the unique perspectives of every culture.

Throughout the afternoon, panelists and speakers shared strategies for success in computing fields. Denise Fogel of Crowe Horwath described how technologists can take their skills to a new level in the talk "Moving from Technologist to Project Manager." High school sessions focused on unleashing creativity, college preparation, and computing career options. Students attended a career and graduate school information fair, and the Michigan Council of Women in Technology helped students hone their interviewing skills during two fast-paced speed interviewing sessions.

Like other small regional celebrations of women in computing, MICWIC provided a low-cost opportunity for students and professionals to come together as a community. Attendees were enthusiastic about sharing their ideas and experiences in a supportive environment, and the men and women who attended filled two short days with an amazing amount of energy and fun.

MICWIC was sponsored by Crowe Horwath; Michigan State University Libraries, Computing and Technology; Eaton Corporation; TechSmith Corporation; the Michigan Council of Women in Technology; and ACM-W.

Conference organizers are looking for enthusiastic individuals to help plan MICWIC 2011. We would also like to expand high school participation. Please send an e-mail to micwic@cse.msu.edu if you would like to be involved.





London Hopper Colloquium 2009

Tuesday 5 May 2009, BCS London Office, U.K.

On 5 May, 2009 over 60 graduate students, postdocs and faculty members attended the annual London Hopper Colloquium held at the British Computer Society (BCS) London Office, U.K. This 1-day event, organized by Queen Mary, University of London (QMUL) and sponsored by BCS, IBM and Women@CL, showcased the exciting work of women in computing research and enabled new researchers to meet with each other as well as with senior women computer scientists.

The day's events included presentations on *Garbage Collection* by Holly Cummins of IBM, *CCTV Video Analysis of People and Places* by Hannah Dee of the University of Leeds, and a *Theory of Mobile Processes* by Nobuko Yoshida of Imperial College London. An IBM-sponsored poster competition drew applications from over 20 Ph.D. students and postdocs who presented a broad array of eye-catching posters describing their computing research.

The London Hopper is one of several efforts by QMUL to encourage women to enter and stay in computing research. For details on all the London Hopper events see:

http://www.dcs.gmul.ac.uk/women/LondonHopper.php.



BCSWomen Undergraduate Lovelace Colloquium

In April, students from all over UK came to Leeds for the 2nd BCSWomen Lovelace Colloquium, a one-day event for women students studying computing or related courses. The day was opened by British Computer Society President Alan Pollard, and speakers came from IBM, Microsoft, Google, and the universities of Lincoln and Nottingham.

The student poster contest had an amazing range of topics and some fantastic presentation. First prize for original project work went to Gemma Warnock of Aberdeen University, and for the open choice contest first prize went to Adriana Alexandru, of the University of Essex. The atmosphere of the day was really positive and feedback has been excellent. If you're in the UK and want to get involved, next year's event will be in Cardiff on April 8 2010. "

There are some high-res photos and a longer account on this site - http://www.comp.leeds.ac.uk/bcswomen/2009/





Grace Hopper Celebration - Save the Date! September 30th through October 3rd, 2009 Tucson, Arizona

By Tracy Camp, Program Chair for GHC 2009 ACM-W Council Member

Save the date for the ninth Grace Hopper Celebration of Women in Computing, the leading conference for women in the field of computing. As in previous years, GHC 2009 offers a forum to inspire, educate, and encourage women, whether in industry or academia, in all aspects of computer science and engineering. With the 2009 theme of Creating Technology for Social Good, GHC 2009 will also recognize and celebrate the significant role women play in defining technology used to solve social issues.

In line with the theme, the 2009 Grace Hopper Celebration is committed to being a Green Conference. It will be held at the JW Marriott Starr Pass Resort and Spa, in Tucson, Arizona. This conference venue has several Green Initiatives: the purchase of both organic food and humanely treated animals, when available, the preservation of 330 acres of land, and the use of corn cups (which break down in composting within 45 days) instead of plastic cups. Additionally, unlike most other conferences, GHC 2009 will offer free child care for all attendees.

GHC 2008 set a record with 1447 attendees from 103 companies, 199 academic institutions, and 7 government labs and agencies. The Grace Hopper Celebration is global in scope; for example, more than 300 speakers from 22 countries represented in 2008. After GHC 2008 ended, a large percentage of attendees reported that they had benefited significantly from attending. They cited professional development, inspiration, and an increase in confidence.

The GHC 2009 program will have 85 sessions, including a new track this year for academics. The program will include several leading researchers presenting their current work, as well as special sessions that focus on the role of women in today's technology fields.

Confirmed keynote speakers include Fran Berman and Megan Smith. Dr. Berman is an ACM Fellow, a Professor and Endowed Chair at the University of California, San Diego, and the Director of the San Diego Supercomputer Center. (In Fall 2009, Dr. Berman will become the Vice President for Research at the Rensselaer Polytechnic Institute.) Megan Smith is the Vice President of New Business Development and General Manager of Google.org.

Confirmed invited speakers include a member of ACM-W's Executive Committee, Susan Landau. Dr. Landau is a Distinguished Engineer at Sun Microsystems and well-known for her work on security and public policy.



Other invited speakers include Jen Mankoff (Carnegie Mellon University), who works to make computers more accessible to individuals who have difficulty typing, Martha Pollack (University of Michigan), who labors to create assistive technology for people with cognitive impairment, and Chat Garcia Ramilo (Women's Networking Support Program), who will educate GHC 2009 attendees on how technology is changing the way that women experience and confront violence.

The ACM-W Council will be well represented on the program. Gloria Townsend (ACM-W Executive Board and Council Member) and Valerie Barr (ACM-W Council Member) are participating on a recruitment & retention panel; Valerie Barr is also participating on a panel for CS1 best practices.

Joanne McGrath Cohoon (ACM-W Council Member) is participating on two panels as well, one on mentoring sensitive issues and one on social science research. Katie Siek (ACM-W Council Member) will discuss her privacy analysis of a wedding planning web site (The Knot or The Noose?) and Robert Walker (ACM-W Council Member) will participate on a panel that considers the value of awards. Three ACM-W Ambassadors, Catherine Lang (Swinburne University of Technology), MaryAnne Egan (Siena College), and Jan Peters (British Computer Society), will present information about international programs that are working to change perceptions about IT courses and careers. GHC 2009 will also have a presentation on the first ACM-W Student Chapter in Latin America (MenTe at ITESM).

GHC 2009 will offer new targeted program components.

- (1) Distinctive tracks for junior members of our community, offered by CRA-W, an organization related to ACM-W (Wednesday).
- (2) A full day technical track on robotics (Thursday)
- (3) A series of Ignite Talks illustrating what members of our community are doing for recruitment and retention (Friday)
- (4) A workshop for those involved in K-12 computing education, from ACM's Computer Science Teachers Association (CSTA) (Saturday)

The CONNECT project will make an appearance at the Grace Hopper Celebration for the second year in a row. With CONNECT,



GHC 2009 attendees can set professional networking goals before the conference begins (e.g., to meet PhD students), and then receive assistance to achieve those goals throughout the conference. After the conference ends, all CONNECT participants receive contact information of other CONNECT attendees that they connected with during the conference. The CONNECT system helps attendees meet an important documented benefit of GHC, i.e., creating a strong professional network.







Ambassador Blog

News from Turkey

(Ambassador: Reyyan Ayfer)

Increasing Female Participation - A CS Project Team Experience with a Difference

I have always dreamed of my students working with an international student team on a computing project. This dream became reality when I met Archana Chidanandan at the 2008 ITiCSE conference at Madrid. Archana is an Assistant Professor of Computer Science and Software Engineering at Rose-Hulman Institute of Technology. Cary Laxer and Archana Chinandran have been carrying out such an international project course with Sweden and decided to collaborate with us too. With the support and dedicated work of my colleagues Lori Russell Dağ and İpek Sözen the project resulted in three products: A web page to teach children about their rights, a Google tool for following up the events related to child rights and games for children age 10-12 to teach them about their rights.

It was a great experience!

Students worked in teams, to analyze, design and develop software solutions for "Child Rights" for the International Children's Center (ICC) where the leaders of the center were very excited and supportive about the project.

Students from the Rose-Hulman Institute visited Bilkent with their supervisor twice during the semester for face to face meetings. At other times they communicated on line using Moodle course management system and other Internet tools like Skype, Facebook, MSN, email. Here is the news item at Bilkent News after the first visit: http://www.bilkent.edu.tr/~Bilnews/issue_15_19/index.html

And the second visit was at the end of the semester to present the final products. You can reach the finished site that includes the games from: http://proje.ctp.bilkent.edu.tr/Code/icc/



In addition to the successful results, what made me very happy is the representation of female CS students on the team: 6 to 5! I am sure that CS will be more attractive for female students when its use and the impact of computing in a global community is emphasized.

With my best wishes and warm regards.





News from Australia

(Ambassador: Catherine Lang)

Two Projects in the Pipeline

The Australian ACM-W Ambassador has two exciting projects in the pipeline this year. The first, Digital Divas targets junior secondary school students. It is a collaborative project funded by the Australian Research Council, with the Education Department, the Australian Computer Society and three universities to design and deliver an interesting curriculum for Years 8 and 9 girls to increase engagement with IT courses and careers. There is a great deal of interest already from both government and private schools. (Photo shows Digital Diva class).

The second project is planning OzWIT 2009: Australian Celebration of Women in ICT. OzWIT has a mission of informing, sharing, community building, and re-energising those involved in the recruitment and retention of women in information technology. The one-day celebration will be held in December this year, providing an opportunity for people from all aspects of ICT, teaching, industry and academia to come together to share knowledge, learn, network and have fun. To make the day a success however, we need many contributors and sponsorship and we are inviting ACM-W members to consider how they might contribute. (Photo shows enthralled audience from AusWIT2006).

Recent statistics from Australia emphasise the need for us to keep working in this arena. In the 21st century the number of students, both male and female, taking up ICT courses and careers is *still* in decline. In Australia the number of students enrolling in ICT courses at universities has decreased by 1/3rd in the last 7 years. More worrying is that the number of women attracted to our field has halved (from 11,566 in 2001 to 6,101 in 2007, ref: DEEWR, http://www.dest.gov.au/sectors/higher_education_statistics_collections.htm#studpubs).







Hello from Saskatoon, Canada!

Ambassador: Julita Vassileva, Canada

(where in April the ice is hesitantly thawing)

Let me present to you Carrie Demmans (in the photo), a 2nd year M.Sc. student in Computer Science at the University of Saskatchewan and a Science Ambassador in a First Nations Community on the Prairies, 2.5 hours North of Saskatoon. But first a few words about the Science Ambassadors Program (http://www.ourscienceambassadors.com). The idea is to send senior undergraduate and graduate students to Aboriginal Communities for extended periods of time (for example, 1 day every week, 1 week every two months, or 6 weeks in spring). The students help the teacher to find and prepare hands-on science activities, experiments, and games and find culturally appropriate ways to explain science laws or phenomena. During the 2008/2009 year Carrie travelled to the community every 6 weeks and spent a week there as Science Ambassador. The school had just acquired enough computers to equip a lap and place a computer in each classroom. The teachers had no experience with computers and Computer Science has never been part of their curriculum, but they realized the importance of teaching their children skills for the digital age. So Carrie helped the teachers and the students get comfortable using the computers and started teaching computer science concepts across all the grades. Here is what Carrie wrote about her experience as a Science Ambassador:

"Last fall I went into a community near where I grew up and started working with the kids and teachers in their primary school. When I first got there I was given a space in the Computer Lab and a schedule to do computer science activities with each of the classes from grade 2 through 8. I also started helping the nursery, kindergarten, and grade 1 classes during their computer class. I would help them with learning how to log on, and use the computer for the task that their teacher assigned. I am now doing computer science activities with the grade ones, and I am still helping the nursery and kindergarten classes with general computer literacy.

After introductions and getting to know the kids in each class a little better, we did an activity about perceptions, where they had to identify the scientists in a picture and explain why they thought each person was or was not a scientist. We then discussed these ideas and I revealed who among those in the photo were scientists and the type of science that they did. We got to talk about what engineers, geologists, biologists, physicists, and computer scientists did at work. We also discussed their hobbies when I thought that a scientist's hobby would be of interest to the kids.

Following that initial activity we did a variety of activities about computer science both on the computer and off the computer.



Some of these activities were borrowed from CSUnplugged, while others were developed by me and members of our university's undergraduate student body for use in their children's summer camp. The kids and teachers have learned about binary numbers, searching strategies, graphics, software engineering design principles, security, algorithms, and a little bit about programming. Even the grade ones have programmed an animation in only 20 minutes by using Scratch! Over the next couple of months, the kids will learn how to use excel by performing a Fits Law experiment, and they will get to build and program Lego MindStorms robots.

I usually try to have the kids perform an activity and have some guided free time on the computer. If we get the planned activity done in time, I may have them try out different recommender systems or visit a particular website that teaches literacy or math skills through games. At first the kids were resistant and just wanted to go look at videos, but they've now gotten used to the system and have their favorite games. What I like about this approach is that it gives the kids some freedom, while ensuring that they are working on core skills that are necessary to their success.

The teachers and administration have done a great job of welcoming me into their community. We help each other out, have potlucks, and share recipes. Their culture teacher has been especially welcoming and we've worked together to find electronic resources that she can use in her Cree classes. Overall, I would say that this continues to be an exceptionally rewarding experience for which I am grateful."



Guest Blogger: Annemieke Craig, Deakin University, Australia

As indicated in Barbara's recent article we would like to celebrate 'Ada Lovelace Day' by publishing an article about a woman in technology. Sandy is the IT Manager for the Institute for Technology Research and Innovation at Deakin University in Australia.

To celebrate Ada Lovelace day we present Sandy's story:

As the youngest of my 3 children approached school age, I began a short IT course to improve my job prospects. One week later, I found I was "unexpectedly expecting" baby number 4. I completed the course and my results were good, including 100% in a database exam 5 days before the birth of my baby, (helping to debunk the myth that pregnancy makes us vague) so I continued on with another certificate, a diploma and graduated with a degree at the ripe old age of 43.

I was only looking to work part time at first and began work straight away as the IT support for a small and friendly group of staff and postgraduate students in the School of Information Systems at





Deakin's Geelong and Warrnambool campuses. I was then transferred to the Faculty IT group which had an emphasis on staff training. Then I increased my hours by working at the same time as IT support in the School of Engineering where I had invaluable support and encouragement from my supervisor/mentor in the School. Next I successfully applied for a full time position in the newly formed Centre for Material and Fibre Innovation. When the Centre combined with BioDeakin and Intelligent Systems Research to form the Institute for Technology Research and Innovation, I was promoted to IT Manager of the Institute where I've been for almost a year.

And what a great position this is! Every day is different and they fly by so quickly. I'm responsible for planning and management of IT support and advice, IT systems and administration for rapidly expanding numbers of ongoing and visiting staff and postgraduate students, maintenance of all computers in our labs, design and maintenance of websites, software licensing, management of leasing and purchase of computers and printers. I supervise a very capable IT technician who assists me. We look after the computers in the advanced cad lab, haptics lab, computers attached to a variety of microscopes, including the electron and atomic force microscopes and those attached to large industrial machines and delicate measuring equipment. We work closely with the other admin and technical staff in our area and other IT staff in the university. We work with interesting people in a multicultural working environment - our staff and students come from places such as China, India, Iran, France, Germany, Italy, New Zealand, Czech Republic, Japan.....at last count we had people from 18 different countries. My job is to make sure they have all the IT resources they need to do their



research in nanotechnology, biomaterials, composites, polymers, fibres, textiles, metals, computer modelling, haptics, robotics, cancer, diabeties, materials for solar panels, lightweight materials for automobiles and aeroplanes, biomaterials for

bone replacements and more. It's worthwhile research that I'm proud to have a small part in.



This brief biographical sketch was done for Ada Lovelace Day, and is reproduced with permission from Sydney Padua's excellent comic blog, 2dGoggles. Please visit Sydney's site to enjoy all of Ada's adventures.:

http://sydneypadua.com/2dgoggles





Then, at a party in 1833, Fate intervenes...

When Ada Lovelace meets Charles Babbage, sparks fly.



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July 31: ACM Advanced Member Grades - Distinguished Engineer/Scientist/Member awards.acm.org/html/amg_call.cfm

August 31: Early registration for the Grace Hopper Celebration ends. For further details, see: http://www.gracehopper.org.

October 9-10: MidWIC Conference (Midwest Women In Computing), Saint Xavier University in Chicago. For more information, please contact Flo Appel: appel@sxu.edu

February 1, 2010: Nomination for Athena Lecturer
Each year ACM honors a preeminent woman computer scientist
as the ACM-W Athena Lecturer, who will give a one-hour invited
talk at an ACM conference determined by the speaker and the
SIG which nominated her.

campus.acm.org/public/acmw/athena_announcement.cfm

<EOM>

by Bettina Bair, Editor

You know, my job editing this newsletter has some pretty nice perks. For instance, I love getting to do the e-nterview segment each issue. All of these women have been amazing and such an inspiration -- like Barbara Grosz. I know that she has a million demands on her time, but she could not have been nicer.



It has also been a treat to get reports from ACMW members about the projects that they're working on. ACMW initiatives like student chapters, regional celebrations and ambassadors truly help create a connected international community of computing women.

Have a question or a story idea? Email me at acmw-cis-editor@acm.org