Research Day an Inaugural Success

Students and faculty turned out in force for the inaugural CoC Research Day, held Sept. 25 in the Klaus Atrium. The event, which was meant to showcase research being done by graduate and undergraduate students, drew 44 presentations, an equal number of posters and 11 research demos, along with a keynote lecture by University of Texas computer scientist Yale Patt. "We look forward to an even bigger Research Day next year, with even broader engagement from both the CoC community--students, faculty and alums--and industry," said Nick Feamster (CS), who co-organized the event with fellow assistant professor Alex Gray (CSE). CoC Research Day was supported by Yahoo!

Research News

<table>
<thead>
<tr>
<th>YTD New Awards</th>
<th>$14,012,815</th>
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Proposed Contracts for August 2009

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<tr>
<th>Total</th>
<th>$Amount</th>
<th>IC</th>
<th>CS</th>
<th>CSE</th>
<th>RIM</th>
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Newly Awarded Contracts for August 2009

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<td>Brain Computer Interfaces</td>
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<td>Administration</td>
<td>Jackson</td>
<td>NSF</td>
<td>$25,000</td>
<td>Charles Isbell None</td>
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<td>Lockheed Martin</td>
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<td>NSF</td>
<td>$267,810</td>
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<td>Qameleon: Hardware/Software Co-operative Automated Tuning for Heterogeneous Architectures</td>
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<td>U.S. Dept. of Commerce</td>
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</table>
People@CoC

Potts Paper Named Most Influential of 1999
A 1999 paper by Associate Professor Colin Potts (IC) was named at the IEEE International Conference on Requirements Engineering 2009 as the most influential paper of 10 years ago. The conference makes the award each year to the work of a decade past that’s deemed to have had the most influence on the field. Potts’ paper, "ScenIC: A Strategy for Inquiry-Driven Requirements Determination," grew out of a larger project done in collaboration with fellow faculty members Gregory Abowd (IC), Ashok Goel (IC), Melody Moore Jackson (IC) and Spencer Rugaber (CS).

Feamster Group Well Represented at SIGCOMM 2009
Assistant Professor Nick Feamster (CS) served as poster and demonstration co-chair at the 2009 ACM Special Interest Group on Communications conference, held Aug. 17-21 in Barcelona, Spain. His research group placed three demos in the conference:
• "Securing Enterprise Networks Using Traffic Tainting": Anirudh Ramachandran (CS); Yogesh Mundada (CS); Mukarram Bin Tariq (CS); Nick Feamster
• "Transit Portal: Bringing Connectivity to The Cloud": Vytautas Valancius (CS); Yogesh Mundada (CS); Nick Feamster; Jennifer Rexford; Akihiro Nakao
• "Network and End-System Support for Transparent use of Multiple Paths": Murtaza Motiwala (CS); Megan Elmore (CS); Yogesh Mundada (CS); Nick Feamster

Liu Co-Edits Special Issue on Trust Management in Chinese CS Journal
Professor Ling Liu (CS) co-edited a special section on "Trust and Reputation Management in Future Computing Systems and Applications, published in the September/October issue of Journal of Computer Science and Technology," the top English journal on computer science in China. Reputation-based trust management is widely recognized as an effective way for an open system to identify and avoid malicious nodes and protect the system from possible misuses and abuses in a decentralized networked computing environment. The special section contains eight peer-reviewed papers that represent recent progress in trust and reputation management of future computing systems and applications, including P2P systems, E-commerce, desktop grid, online ratings and Web services. Liu’s co-editor was Weisong Shi, associate professor of computer science at Wayne State University in Detroit.

Goodman Delivers Keynote at GITMA 2009
Professor Sy Goodman (CS) delivered an invited keynote address at the Global Information Technology Management Association 2009 conference, held June 14-16 in Mexico City. Goodman’s talk was titled "The Perils of Cyberspace (and What Might MIS People Do to Make Things Better?)," and he followed it up by chairing a panel discussion on "International Dimensions of Cyber Security." The conference began a busy summer for Goodman, who also was an invited participant to a workshop on "The Future of Cyber Attribution," held at Sandia National Laboratory on July 27. During the Broadband World Forum 2009, held Sept. 7-9 in Paris, Goodman delivered an address at the co-located Marconi Society Plenary Session, titled "ICT in Africa: The Remarkable Story of a Glass Half Full."

Feamster, Gray Set a SNARE at Security Conference
Assistant professors Nick Feamster (CS) and Alex Gray (CSE) presented their paper, "Detecting Spammers with SNARE: Spatio-temporal Network-level Automatic Reputation Engine," at the USENIX Security 2009 conference, held Aug. 10-14 in Montreal. The paper, which was also covered in Technology Review, describes a new spam-detection filter that can evaluate incoming email on a number of factors and using only a single packet of data—requiring far fewer network resources than traditional spam filters.

Isbell Joins CISE Advisory Board
Associate Professor Charles Isbell (IC) has been named to the 25-member advisory
committee of the NSF Directorate for Computer & Information Science & Engineering (CISE). CISE is the NSF arm responsible for computer science and its related fields, and the advisory committee’s role is to “provide up-to-date information on the state of the field, perform specialized policy-informing functions facilitating NSF’s response to rapid changes in the CISE subdisciplines and the balance between them, and to identify situations requiring policy attention,” according to its website. Isbell will serve a two-year term. CS Professor and Chair Ellen Zegura has rotated off as a member of the same committee.

Vazirani Gives Invited Talk at ALGO 2009
Professor Vijay Vazirani (CS) delivered an invited talk on "Combinatorial Algorithms for Convex Programs Capturing Market Equilibria and Nash Bargaining Solutions" at ALGO 2009, the major European meeting of researchers and students of algorithms. Held Sept. 7-11 at the IT University of Copenhagen in Denmark, the event combined the major European algorithms conference, European Symposium on Algorithms (ESA), with a number of smaller, specialized conferences and workshops.

Mynatt Presents at the Intel Developer Forum
Beth Mynatt was invited by Justin Rattner, chief technology officer for Intel Corp., to take part in the final plenary presentation of Intel's Developer Forum, held in San Francisco, Sept. 22-24. Mynatt talked about the future of social media and highlighted some of the exciting work coming out of the GVU Center. Video of the plenary session is below.

Ram Speaks at CMU On User-Generated AI in Gaming
Associate Professor Ashwin Ram (IC) was invited to lead a colloquium at Carnegie Mellon University on Sept. 28. Ram's talk, "User-Generated AI for Interactive Digital Entertainment," argued that user-generated artificial intelligence is the next big frontier in the rapidly growing social gaming area. From Sims to Risk to World of Warcraft, Ram held that end users want to create, modify and share not only the appearance but the "minds" of their characters. Click here to view the colloquium schedule and read an abstract of Ram's talk.

Best Moderates Nobel-Decorated Panel Discussion at Harvard
Assistant Professor Michael Best (IC) moderated a panel on Sept. 23 at Harvard University's Berkman Center for Internet & Society that included two Nobel laureates. Titled "Communication and Human Development: The Freedom Connection?" the panel included Amartya Sen, Lamont University Professor and professor of economics and philosophy at Harvard (awarded the Nobel Prize in economics in 1998); Michael Spence, senior fellow at the Hoover Institution and Philip H. Knight Professor Emeritus of Management in the Graduate School of Business at Stanford University (awarded the Nobel Prize in economics in 2001); Yochai Benkler, Berkman Professor of Entrepreneurial Legal Studies at Harvard and faculty co-director of the Berkman Center; and Clotilde Fonseca, founding director of the Costa Rican Program of Educational Informatics. Click here for details about the panel and its participants.

Stasko, Colleagues to Present Strong Showing at VisWeek 2009
The College will have strong representation at IEEE VisWeek 2009, the premier forum for visualization advances in science and engineering for academia, government and industry. The
event, to be held Oct. 11-16 in Atlantic City, N.J., is the conjunction of three conferences and symposia: the IEEE Visualization (Vis) and IEEE Information Visualization (InfoVis) conferences, and the IEEE Visual Analytics Science and Technology (VAST) Symposium. Professor John Stasko (IC) is the papers co-chair for the VAST Symposium, and he is organizing the symposium’s capstone panel, “How Interactive Visualization Can Assist Investigative Analysis: Views and Perspectives from Domain Experts.” Postdoctoral researcher Carsten Gorg (IC) and Professor Haesun Park (CSE) are on the VAST program committee. Stasko also is serving on the program committee for InfoVis and is a member of its steering committee as well.

Professors Vladimir Koltchinskii (Math) and Haesun Park (CSE) are leading the planning for the workshop “Forum on Geometric Aspects of Machine Learning and Visual Analytics,” held in association with VisWeek, that will bring together leading U.S. researchers in the machine learning field. This workshop was created by the NSF/DHS-funded Foundations Of Data And Visual Analytics (FODAVA) Program, led by Park and a team of Georgia Tech faculty. Professor Santosh Vempala (CS) will present his work at this workshop on “Affine-Invariant Principal Components.”

Several College faculty and students will present papers:

At VAST:
- "A Visual Analytics System for Radio Frequency Fingerprinting-based Localization," by Yi Han (IC), Erich P. Stuntebeck (IC), John Stasko, Gregory Abowd (IC)
- "Two-stage Framework for Visualization of Clustered High Dimensional Data," by Jaegul Choo (CSE), S. Bohn, Haesun Park
- "Evaluating Visual Analytics Systems for Investigative Analysis: Deriving Design Principles from a Case Study," by Youn-ah Kang (IC), Carsten Gorg (IC), John Stasko

At InfoVis:
- "ResultMaps: Visualization for Search Interfaces," by Edward C. Clarkson (IC), Krishna Desai (IC), James D. Foley (IC)

Finally, a team of students including Jaegul Choo (CSE), Hanseung Lee (ECE), Pedro Walteros (Math) and Emily Fujimoto won an award for “Good Analytical Technique” for their work, "Timeline Analysis of Undercover Activities," in the VAST Challenge Competition. This competition features teams from around the world competing to solve data analysis and visualization “challenge problems” defined by a committee of experts, culminating in a workshop held during VisWeek. Fujimoto, an undergraduate at Harvey Mudd College, participated in this competition as a summer intern in the Computing Research Undergraduate Intern Summer Experience (Cruise) program developed by CSE.

Two New Postdocs Recipients of CIFellowship Awards

Davide Fossati and Cristian Lumezanu, two new postdoctoral researchers in IC and CS, respectively, are being supported by prestigious CRA/CCC/NSF Computing Innovation Fellowships. The joint program between the Computing Research Association and the Computing Community Consortium, with funding from NSF, enables new Ph.D. graduates to obtain one-to-two year postdoctoral positions at host organizations—including universities, industrial research laboratories, and other organizations—that advance the field of computing and its positive impact on society. The goals of the “CIFellows” project are to retain new Ph.D. holders in research and teaching and to support intellectual renewal and diversity in the computing fields at U.S. organizations. Lumezanu, who will work with Assistant Professor Nick Feamster, earned his Ph.D. from University of Maryland and will work on a project called “Economic Models for Internet Connectivity” under the mentorship of Feamster, who serves as sponsor and PI for the award. Fossati, a Ph.D. graduate of the University of Illinois at Chicago, will work with Professor Mark Guzdial in supporting formative assessment of computing education, using artificial-intelligence techniques.

2009-10 Foley Scholars Finalists Announced
The GVU Center announced eight finalists for 2009-10 Foley Scholarship award. The finalists are Ph.D. students Marshini Chetty, Betsy DiSalvo, Matt Flagg, Andrea Grimes, Erika Poole, Thomas Smyth, Erich Stuntebeck and Sarita Yardi. The Foley Scholars Endowment, named for original GVU director and current College interim Dean Jim Foley, was established in 2007 during the 15th anniversary of GVU and awards $5,000 to two outstanding graduate students who are active in research at GVU. Final selection will be made in October by a committee comprising GVU alumni, industrial partners and faculty. Both finalists and scholarship...
recipients will be honored at reception and dinner on Oct. 14 at the Ansley Golf Club. For more information about the Foley Scholars Endowment, visit the GVU [website](http://www.cc.gatech.edu/compiler/).

**Personnel Announcements**

David Stone has joined CoC as a Financial Manager II in IC effective 9/3/09. His email address is dstone@cc, phone number is 4-4769 and he is located in TSRB 205. Welcome David!

Brian Boddy has been hired permanently as an Accountant II in CoC’s Financial Services effective 9/14/09. His email address is bboddy@cc, phone number is 5-1946 and he is located in CCB 158B. Congratulations Brian!

Davide Fossati has joined CoC as a Post-Doc in IC effective 8/16/09. His email address is dfossati@cc and he is located in CCB 260. Welcome Davide!

Mario Romero has joined CoC as a Post-Doc in IC effective 9/10/09. His email address is mario@cc. Welcome Mario!

Gagan Goel has joined CoC as a Post-Doc in CS effective 9/9/09. His email address is gagang@cc, phone number is 5-1307 and he is located in KACB 2113. Welcome Gagan!

Pushkar Kolhe has joined CoC as a Temporary Research Scientist I in IC effective 9/22/09. His email address is pushkar@cc and he is located in CCB 272B. Welcome Pushkar!

**General News**

**College Celebrates Women in Computing**

To coincide with the 2009 Grace Hopper Celebration of Women in Computing, held Sept. 30 to Oct. 3 in Tucson, Ariz., the College is celebrating its own women by sending a strong contingent to the conference and promoting them via the CoC [website](http://www.cc.gatech.edu/compiler/) and social media outlets. Professor Ellen Zegura (CS) represented the faculty at the conference, which was themed “Creating Technology for Social Good.” Zegura was joined by several College graduate students, including Erika Poole (IC), Chaitrali Amrutkar (CS) and Nova Ahmed (CS).

Office of Outreach, Enrollment and Community staff members Meredith Goodman and Jennifer Whitlow accompanied 11 computing undergraduates to the conference: Donna Yoo, Dawn Finney, Victoria Au, Katie Collins, Angela Mingione, Candis Pham, Linda Huynh, Candace Mitchell, Jessica Watson, Mansi Sharma, Joy Buolamwini. Many of the undergraduates already have interviews and meetings lined up with top companies from the technical field. Check out more stories of CoC women by following the College’s [Twitter](http://www.cc.gatech.edu/compiler/) feed and [Facebook](http://www.cc.gatech.edu/compiler/) page.

**GT Reopens Search for College Dean Candidates**

The committee charged with recommending a candidate to become the next College dean has reopened its search, at the request of Georgia Tech Provost Gary Schuster. Interim Dean Jim Foley has convened an additional, informal group of senior faculty, who will help by recruiting and recommending candidates to the search committee. In a meeting with College faculty and staff on Sept. 15, Schuster said the search committee may forego the traditional “airport interview” stage with promising candidates and instead invite those people directly to campus. The executive search firm of Russell Reynolds Associates will continue to assist with the process. For more information on the dean search, visit the College [website](http://www.cc.gatech.edu/compiler/).

**M.S. InfoSec to Add Distance Learning Option in Fall 2010**

The state Board of Regents has given its approval for the College to offer the M.S. degree in information security via distance learning. Beginning in fall 2010, working professionals and others who cannot attend Georgia Tech full time can apply to the M.S. InfoSec distance learning program. Students will be able to access the same course content and hands-on projects that will help them deepen their understanding of areas like cryptography, system, software and network security, and security policies and strategies. Access to a dedicated information security laboratory will allow students to complete projects that will help them master underlying concepts and develop practical skills to secure information systems. The program is designed for students who either have an undergraduate degree in computer science or related disciplines or whose background includes courses in areas such as discrete mathematics, computer organization, operating systems and network protocols. Students are also expected to have strong programming skills.

**CoC Jumps Under the Big Top for GT Homecoming**

For the first time the College will be an official participant in Georgia Tech’s Homecoming
activities, running Oct. 11-17 on campus. A committee led by senior CS major Michael Slaughter is organizing CoC’s participation in the event, which is themed "Buzz Under the Big Top." In addition to decorating the CCB lobby and building a tissue-papered display in the CCB plaza, the College will field entries in such competitions as the Clown Relay, the “Great Clown Car Act” (think: how many clowns can fit in a box?), the traditional GT Mini 500, Tech Trivia Night, a photo scavenger hunt, and “Can-Tortions,” in which participants build structures out of canned foods along the Skiles Walkway, with all building materials going to the Atlanta Food Bank afterwards. For more information about Homecoming, visit the Buzz Under the Big Top website; to get involved with the College’s efforts, contact Slaughter at mslaughter3@gatech.edu.

Women@CC to Haunt CCB With Phantasma, Oct. 30
Women@CC has gotten off to a strong start this fall, hosting a resume workshop and a pasta dinner made by co-chairs Candis Pham and Victoria Au. The organization, which is dedicated to supporting women at all levels—undergraduates, graduate students, staff and faculty—involved in computing at Georgia Tech, will host its Halloween-themed event, Phantasma, on Oct. 30. The Friday afternoon party gives CoC students a chance to meet professors (and each other) outside the classroom and enjoy free food, games (such as Hula-Hoop and Pac-man), food-eating and costume contests, pumpkin carving, live music and more. Free prizes also will be given away. For more information, check out a Women@CC meeting, held every Monday from 5-6 p.m. in CCB 104.

TSO Adds Staff to Research and Instructional Support
To provide enhanced research and instructional support, TSO moved two staff members from its operations group in September. Peter Wan now works with the TSO Research Program Support group and focuses on general services to College researchers. David Mercer now works with the TSO Enterprise Systems Support group in the Help Desk area, focusing on support of instructional technology and services (e.g., instructional labs, academic servers, etc.).

GVU Demo Showcase Set For Oct. 15
The GVU Demo Showcase, featuring two floors of innovative and insightful research by the GVU faculty and students, will take place on Thursday, Oct. 15, from 1-3:30 pm in the GVU Center in TSRB. This year’s GVU research showcase will be included as part of Georgia Tech’s Future Media Symposium.

Dates, Courses Set for Barcelona, GTL in Summer 2010
Course offerings are now set for the College’s summer programs in Barcelona and at Georgia Tech-Lorraine (France). Both programs offer undergraduate students the opportunity to spend a full summer in a culturally rich European environment.

The Georgia Tech-Lorraine (GTL) summer 2010 session will run from May 18 to July 30. As a faculty-led program, GTL offers a balance of engineering, science, French language, management and social science courses from the Institute course catalog. Students will have the opportunity to select from 35 courses that include a variety of options from such colleges and schools as Management, IsyE, ECE, Math, HTS and ChBe. The computer science offerings for summer 2010 are:
• CS 3251 Computer Networking
• CS 4001 Computing and Society
• CS 4400 Introduction to Database Systems
• CS 2699 Undergraduate Research

The program in Barcelona will take place from May 17 to July 26. Student participants will be able to choose from an interdisciplinary selection of courses that will exploit the Spanish coastal city’s unique learning setting. Below are the courses to be offered:
• ARCH 4128: Barcelona: Architecture & Design (humanities)
• COA 4803: Cities & Citizens: What Makes Great Cities Great (social science)
• CS 3750: Human-Computer Interface Design and Evaluation
• CS 4001: Computing, Society and Professionalism (ethics)
• CS 4475: Computational Photography
• CS 4793: Perspectives in Cognitive Science
• SPAN: Spanish-language courses at different proficiency levels (humanities)

Barcelona's application deadline is Jan. 15, 2010; GTL's is Feb. 15, 2010. Information sessions
to present these details and more will be announced soon. For more information about GTL, visit the program's [website](http://www.cc.gatech.edu). For more information about Barcelona, visit the program [website](http://www.cc.gatech.edu) or contact Dawn Rutherford, program coordinator, at [barcelona@cc.gatech.edu](mailto:barcelona@cc.gatech.edu).