GVU, IC Abuzz with 'Interactivity'

Harish Kothandaraman (right), a master's student in human-computer interaction (HCI), chats with strategic IT consultant Alan Ariel from Humana during the 10th annual Interactivity@GT. The event, an annual showcase of HCI and digital media projects, was held Feb. 21 in TSRB and co-hosted by the School of Interactive Computing and the GVU Center (see item below). This year's Interactivity even featured its own mobile app, developed by digital media M.S. student Jayraj Jog.

Research News

Financial Dashboard for January 2011

<table>
<thead>
<tr>
<th>2011 YTD New Awards</th>
<th>Proposed Contracts for January 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20,915,253</td>
<td>Total $ Amount IC CS RIM</td>
</tr>
<tr>
<td></td>
<td>10  $7,266,072 47% 34% 19%</td>
</tr>
</tbody>
</table>

Newly Awarded Contracts for January 2011

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Value</th>
<th>PI</th>
<th>Co-PIs</th>
<th>Title</th>
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<td></td>
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74.2%

CS Fall 2010 graduates who had a job at the time of graduation

1.92

Average number of job offers reported by Fall 2010 CS grads

203

http://www.cc.gatech.edu/compiler/


<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Value</th>
<th>PI</th>
<th>Co-PIs</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSF</td>
<td>$416,000</td>
<td>Hyesoon Kim</td>
<td>None</td>
<td>CAREER: CPU and GPU Based Heterogeneous Architecture Design and Managements</td>
</tr>
<tr>
<td>Emory University</td>
<td>$32,059</td>
<td>Tucker Balch</td>
<td>None</td>
<td>Amygdala Sex Differences in Behavior Cognition and Neuroendocrine Development</td>
</tr>
<tr>
<td>Pacific Northwest National Labs</td>
<td>$250,000</td>
<td>David Bader</td>
<td>None</td>
<td>Center for Adaptive Supercomputing Software for MultiThreaded Architectures (CASS-MT): High-Performance Computing for Massive Graph Analysis</td>
</tr>
<tr>
<td>Emory University</td>
<td>$41,505</td>
<td>Jim Rehg</td>
<td>None</td>
<td>Automated Macular Pathology Diagnosis in Three-Dimensional (3D) Spectral...</td>
</tr>
<tr>
<td>Raytheon/BBN S&amp;T</td>
<td>$26,000</td>
<td>Nick Feamster</td>
<td>None</td>
<td>Curveball: Safer Warfighter Communications</td>
</tr>
<tr>
<td>Lawrence Livermore National Labs</td>
<td>$49,496</td>
<td>Rich Vuduc</td>
<td>None</td>
<td>Compiler-Support for Reverse Computation</td>
</tr>
<tr>
<td>NSF</td>
<td>$430,343</td>
<td>Chris Peikert</td>
<td>None</td>
<td>CAREER: Lattices in Cryptography</td>
</tr>
<tr>
<td>Carnegie Mellon University</td>
<td>$58,667</td>
<td>Mike Stilman</td>
<td>None</td>
<td>Robust Dexterous Manipulation</td>
</tr>
<tr>
<td>NSF</td>
<td>$43,239</td>
<td>Tom Conte</td>
<td>None</td>
<td>An Interactive &quot;Human Sensor Web&quot; for Improved Model Predictions of the ...</td>
</tr>
<tr>
<td>Intel</td>
<td>$15,000</td>
<td>Nick Feamster</td>
<td>None</td>
<td>Flexible Programming Network Devices</td>
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<tr>
<td>Intel</td>
<td>$80,000</td>
<td>Keith Edwards</td>
<td>None</td>
<td>Device-Rich Social Environments</td>
</tr>
<tr>
<td>Business Computer Applications</td>
<td>$20,000</td>
<td>Sham Navathe</td>
<td>None</td>
<td>Healthcare Database</td>
</tr>
</tbody>
</table>
| MAQUET Cardiovascular          | $50,000    | Irfan Essa | William Cooper (Emory University)                                       | Cardiac Surgeon Training

**Grants/ Gifts Received for January 2011**

**People@CoC**

**Ram Co-Organizing 2011 Conference on Case-Based Reasoning**

Ashwin Ram (IC) is general program co-chair for the 19th International Conference on Case-Based Reasoning (ICCBR-11), the world's top conference for case-based reasoning (CBR), to be held Sept. 12-15 in London. To expand the frontiers of CBR as a scientific field, Ram and fellow co-chair Nirmalie Wiratunga (Robert Gordon University, United Kingdom) are emphasizing connections between CBR and related areas, as well as exploring new problems and industrial solutions.

**Stasko Shows Off Jigsaw at Journalist Conference**

John Stasko (IC) presented his software, Jigsaw, at the 2011 Computer-Assisted Reporting conference.
**Isbell, Team Win Poster Award at Pediatric Research Retreat**

Master's student **Sheila Isbell** (CS) won Best Poster at the First Pediatric Scientific Research Retreat, held Jan. 28 and sponsored by Children's Healthcare of Atlanta. Isbell's project, "Catch-Up Immunization Scheduling for Children and Adolescents," explored an online immunization-scheduling tool to assist health care professionals. Her fellow team members included Professor Pinar Keskinocak (ISyE), associate director for research for the Health Systems Institute and co-director of the Health and Humanitarian Logistics Center, and graduate student Hannah Smalley.

**Bader & Co. Give Tutorial on Parallel Programming at PPoPP 2011**

Professor **David Bader** and research scientist **Jason Riedy** (both CSE), as well as Ph.D. student **David Ediger** (ECE), presented a full-day tutorial on parallel programming for graph analysis at the 16th ACM SIGPLAN Annual Symposium on Principles and Practice of Parallel Programming (PPoPP 2011), held in San Antonio, Texas. PPoPP is a forum for leading work on all aspects of parallel programming, including foundational and theoretical aspects, techniques, tools and practical experiences. In their tutorial, Bader and his colleagues' goal was to provide a comprehensive introduction to the field of parallel graph analysis for an audience with a computing background that was interested in participating in research and/or commercial applications of the field.

**'Liquid Text' Project Wins GTRIC Competition**

Ph.D. student **Craig Tashman** (CS) took first prize in Georgia Tech's 2011 Research & Innovation Conference (GTRIC), held Feb. 8 in the Student Center. Tashman's project, "LiquidText: Active Reading through Multitouch Document Manipulation," presents an innovative way to read and annotate documents, taking full advantage of tablet PCs and other, larger touch-screen interfaces to significantly enhance reader experiences with text documents. Tashman took home a $15,000 prize as GTRIC's first-place winner. Overall, the College of Computing did well at GTRIC 2011. Ph.D. students **Svetlana Yarosh** and **Kimberly Weaver** (both HCC) took home $5,000 fellowship awards, while Ph.D. student **Yogesh Mundada** (CS) and MS student **Justin Ratcliffe** (HCI) received $1,500 travel awards.

**Ram to Speak on Open Social Learning in WIMS 11 Keynote**

Ashwin Ram (IC) will deliver a keynote address at the 2011 International Conference on Web Intelligence, Mining & Semantics (WIMS 11), to be held May 25-27 in Sogndal, Norway. Ram's talk, "Open Social Learning Communities," addresses "how to engage a generation of learners who live on the Internet yet tune out of school, who seek interaction on Facebook yet find none on iTunes U, who need community yet are only offered content. We propose a new approach to this problem: open social learning communities anchored with open content, providing an interactive online study group experience akin to sitting with study buddies on a world-wide campus quad."

**Honeybee 'Waggle Dance' Video a YouTube Hit**

Tucker Balch (IC) may have discovered a new career--video production--with the success of a new video, "The Waggle Dance of the Honey Bee." The video was created by master's student **Andy Quitmeyer** from Balch's Multi-Agent Robotics & Systems (MARS) lab, with narration provided by **Colin Potts** (IC). Over seven and a half educational minutes, the video explains how bees communicate the location of food sources to each other through a "waggle dance," and discusses how research into bee and other types of animal communication could yield new insights for robotics research. CoC posted the video to its YouTube channel on Friday, Feb. 4, and before the weekend was out it had received more than 2,500 viewings. Currently its total hits are up over 5,100.

**Personnel Announcements**

**Laszlo (Laci) Veth** has joined CoC as a Post-Doc in CS effective 2/1/11. His email address is lvegh@cc, phone number is 5-2272 and is located in KACB 2115. Welcome Laszlo!

**Fuxin Li** has joined CoC as a Post-Doc in CSE effective 2/7/11. His email address is fli@cc, phone number is 5-2024 and is located in KACB 1333. Welcome Fuxin!

**Constantinos Mannouris**' last day at CoC was 1/7/11. Best wishes, Constantinos!
College Conducting Chair Searches for Schools of CS, IC
The College of Computing has begun concurrent searches for the next chairs of the schools of Computer Science and Interactive Computing. Professors Henrik Christensen (IC) and Dana Randall (CS) will chair the search committees for CS and IC, respectively. Zvi Galil, John P. Imlay Dean of Computing, announced the searches in late February, and the full membership of the search committees was announced March 1. “Both schools were formed four years ago, and they have reached a point in their evolution where it is time to look far and wide for the people who will lead them to the next stage of excellence,” Galil said. “I’d like to extend special thanks to professors Ellen Zegura and Aaron Bobick, who stayed on as CS and IC chairs to ensure the College’s smooth transition to its new dean. Both have done fine jobs and have graciously agreed to continue in their roles during these searches.”

Both search committees represent the range of constituencies related to the schools and were formed with input from the respective schools’ faculty. Christensen, chair of the CS search committee, is KUKA Chair of Robotics and director of the Center for Robotics & Intelligent Machines at Georgia Tech (RIM@GT). Randall, chair of the IC committee, is professor of computer science.

Save the Date: GVU Spring Research Showcase
The GVU Spring Research Showcase will be held Thursday, April 14, from 4-7 p.m. in TSRB. GVU faculty and students will showcase the latest research developments in areas such as: animation and graphics, augmented reality, brain-computer interfaces and assistive technology, collaborative work, domestic computing, digital media, gaming, health and wellness, human-computer interaction, human-robot interaction, learning, music technology, social computing, tangible media, and wearable computing. Following the showcase, the Computing Alumni Organization will sponsor a reception at which GVU Acting Director Keith Edwards (IC) will discuss the center and its mission.

TSO Plans TSRB Power, Server Outage on March 11 & 12
The TSRB building will experience a partial building power outage on Friday night, March 11, at 11 p.m., and will be without power until approximately 5 a.m. on Saturday, March 12. The maintenance work is necessary for electricians to replace the main emergency power breaker (which powers emergency lights, doors, etc.). To accommodate the work, TSO will shut down the TSRB MDF Data Center starting March 11 at 9 p.m., powering them back on at 8 a.m. on March 12. This means several server resources will be unavailable during the maintenance period. Please check the System Notices section of the TSO website for more details.

IC and GVU Host 10th Interactivity@GT
On Feb 21, the School of Interactive Computing and the GVU Center hosted Interactivity@GT - a yearly exhibition of projects by MS students in Human-Computer Interaction and Digital Media programs. Sponsored by Roundarch, Interactivity@GT is a good opportunity for students to find internships or post-graduation employment. This year, nearly 60 students and more than 30 industry representatives participated in this “reverse career fair.”

OEC Announces Mentors for 2011 CoC Freshmen
Twenty-five CS and CM undergraduates have been selected by the Office of Outreach, Enrollment and Community to serve as 2011 College of Computing mentors to this fall’s incoming class of students. Mentors will assist the students in their transition from high school to Georgia Tech and the College of Computing. In response to an “overwhelming” number of applications this year, OEC is proud to announce and congratulate the following 2011 College of Computing mentors:
- CM majors: Jessica Crabb, Makario Lewis and Griva Patel

CoC In the News
To help Compiler readers stay informed of the latest College of Computing media coverage, we share the month’s headlines from the CoC website. Below are links to all headlines from Feb. 1, 2011, to Feb. 28, 2011 (most recent headlines at the top).

http://www.cc.gatech.edu/compiler/
Social Robots Engineer (Friendly) NOVA Takeover
iPhone Users Get Access to Argon Augmented Reality Browser
Argon, the Augmented Reality Web Browser, Available Now on iPhone
Users Worldwide Can Unite in Online Study Groups
IBM's Watson Becomes Big Man on Campus with Jeopardy! Win
'It's Elementary, Watson. You're Not That Smart'
Young Black Males, Learning & Video Games
Waggle Dance of the Bees
'Jeopardy!' Computer Creator to Speak at Georgia Tech
Peikert Named a 2011 Sloan Research Fellow
Meet the Future: 10 Robots on the Rise
'Liquid Text' Project Wins GTRIC Competition
Henrik Christensen to Receive 2011 Engelberger Award for Robotics
The Internet's Gatekeepers
Augmenting Reality at Georgia Tech
Bader Receives IEEE Golden Core Member Award
Unmanned Future: Do Humans Fit In?
New Research Institute to Connect People and Technology
Chris Peikert, Hyesoon Kim Earn NSF CAREER Awards
Newsmaker: Egypt, Internet Kill Switch