FutureMedia Set for 2010 Return

Last year's inaugural FutureMedia Fest provided an opportunity for researchers, artists, investors, entrepreneurs and other leaders in digital media to come together in an atmosphere of exploration and collaboration. This year's follow-up, FutureMedia Fest 2010, is set for Oct. 4-7 on the Georgia Tech campus. Register now for an interactive mash-up of talent, ideas, trends and technology centered around how content is created, distributed and consumed (see item below under General News). Photo courtesy of FutureMedia.

Research News

Financial Dashboard for April 2010

<table>
<thead>
<tr>
<th>2010 YTD New Awards</th>
<th>Proposed Contracts for April 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>$29,051,267</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Newly Awarded Contracts for April 2010

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Value</th>
<th>PI</th>
<th>Co-Pls</th>
<th>Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Texas at Austin</td>
<td>$45,000</td>
<td>George Biros</td>
<td>None</td>
<td>Collaborative Research: Understanding the Dynamics of the Earth: High Res...</td>
<td></td>
</tr>
</tbody>
</table>
Grants/Gifts Received for April 2010

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Value</th>
<th>PI</th>
<th>Co-PIs</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft</td>
<td>$25,000</td>
<td>Henrik Christensen</td>
<td>None</td>
<td>Computer Vision Services Library for RDS</td>
</tr>
<tr>
<td>Microsoft</td>
<td>$75,000</td>
<td>Henrik Christensen</td>
<td>None</td>
<td>Course Development: Software Engineering for Robots</td>
</tr>
<tr>
<td>NSF</td>
<td>$120,437</td>
<td>Rich Vuduc</td>
<td>None</td>
<td>CAREER: Autotuning Foundations for Exascale Computing</td>
</tr>
</tbody>
</table>

Financial Dashboard for May 2010

**Proposed Contracts for May 2010**

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Value</th>
<th>PI</th>
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<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM</td>
<td>$20,000</td>
<td>David Bader</td>
<td>None</td>
<td>IBM Faculty Award</td>
</tr>
<tr>
<td>Google</td>
<td>$500</td>
<td>Alex Orso</td>
<td>None</td>
<td>Undergraduate Research Symposium</td>
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<tr>
<td>Nokia</td>
<td>$10,000</td>
<td>Gregory Abowd</td>
<td>None</td>
<td>Child's Play Videoconferencing</td>
</tr>
</tbody>
</table>

Newly Awarded Contracts for May 2010

<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>$20,000</td>
<td>Ashok Goel</td>
<td>None</td>
<td>Doctoral Symposium at the 6th Intl. Conf. on the Theory &amp; Application of Diagrams</td>
</tr>
<tr>
<td>Alfred P. Sloan Foundation</td>
<td>$50,000</td>
<td>Karen Liu</td>
<td>None</td>
<td>Optimal Human Motion</td>
</tr>
<tr>
<td>Northrop Grumman</td>
<td>$40,000</td>
<td>David Bader</td>
<td>Hyesoon Kim, Tom Conte, Nate Clark, Rich Vuduc</td>
<td>Membership for the NSF Center for Hybrid Multicore</td>
</tr>
</tbody>
</table>

Grants/Gifts Received for May 2010

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Value</th>
<th>PI</th>
<th>Co-PIs</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Motors</td>
<td>$15,000</td>
<td>Henrik Christensen</td>
<td>None</td>
<td>Research Support</td>
</tr>
<tr>
<td>GT Center for the Enhancement of Teaching &amp; Learning</td>
<td>$1,000</td>
<td>Colin Potts</td>
<td>None</td>
<td>Class of 1969 Fellowship</td>
</tr>
<tr>
<td>Disney</td>
<td>$27,000</td>
<td>Ashwin Ram</td>
<td>None</td>
<td>Autonomous Agents</td>
</tr>
</tbody>
</table>

Financial Dashboard for June 2010

**Proposed Contracts for June 2010**

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Value</th>
<th>PI</th>
<th>Co-PIs</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>General Motors</td>
<td>$15,000</td>
<td>Henrik Christensen</td>
<td>None</td>
<td>Research Support</td>
</tr>
<tr>
<td>GT Center for the Enhancement of Teaching &amp; Learning</td>
<td>$1,000</td>
<td>Colin Potts</td>
<td>None</td>
<td>Class of 1969 Fellowship</td>
</tr>
</tbody>
</table>

Numbers & Stats

- **11.5%** Increase in College's CS undergrad enrollment over 2009 (913 total students)
- **19%** Percentage of 2010 CoC freshmen who are women, the highest in College history
- **$32.5M** Amount of research new awards to CoC in fiscal year 2010
- **329,707** Number of new malware samples automatically processed by GTI SC in July 2010

Industry Outreach

This month various groups at CoC are pursuing partnerships with the following companies:

- Elementary Student Workshop: LEGO NXT Robots
  CCB 345
- Fall Town Hall
  Klaus 1116
- CoC Research Day
  Klaus Atrium
- Family Weekend
  Georgia Tech
- TSO Brownbag
  Klaus 1116E
- Sept. 28 to Oct. 2 Grace Hopper 2010
  Hyatt Regency Atlanta
### Newly Awarded Contracts for June 2010

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Value</th>
<th>PI</th>
<th>Co-PIs</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualcomm</td>
<td>$350,000</td>
<td>Blair MacIntyre</td>
<td>None</td>
<td>Qualcomm AR Game Studio</td>
</tr>
<tr>
<td>NSF</td>
<td>$82,134</td>
<td>Chris Peikert</td>
<td>None</td>
<td>Collaborative Research: CT-ISG: Efficient Cryptography Based on Lattices</td>
</tr>
<tr>
<td>U.S. Dept. of Interior</td>
<td>$230,016</td>
<td>Rich Vuduc</td>
<td>None</td>
<td>Foundations for a High-Speed Low-Power Data Analytics Appliance</td>
</tr>
<tr>
<td>NSF</td>
<td>$900,000</td>
<td>Alex Orso</td>
<td>None</td>
<td>MEDITA: Multi-layer Enterprise-wide Dynamic Information-flow Tracking &amp; Assurance</td>
</tr>
<tr>
<td>NSF</td>
<td>$185,122</td>
<td>Sudhakar Yalamanchili</td>
<td>Karsten Schwan</td>
<td>From Business Analytics to Accelerator Clouds</td>
</tr>
<tr>
<td>NSF</td>
<td>$43,357</td>
<td>Melody Moore Jackson</td>
<td>None</td>
<td>Student Support for the Fourth International Brain-Computer Interface Meeting</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>$51,000</td>
<td>Calton Pu</td>
<td>None</td>
<td>Experimental Study of N-Tier Application Systems Performance (Phase 2)</td>
</tr>
<tr>
<td>Equifax</td>
<td>$20,000</td>
<td>Mustaque Ahamad</td>
<td>None</td>
<td>Malware Analysis, Compromise Detection and Mitigation</td>
</tr>
</tbody>
</table>

### Grants/Gifts Received for June 2010

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Value</th>
<th>PI</th>
<th>Co-PIs</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google</td>
<td>$50,000</td>
<td>Vijay Vazirani</td>
<td>None</td>
<td>Algorithms for Markets</td>
</tr>
<tr>
<td>Intel</td>
<td>$25,000</td>
<td>Paul Royal</td>
<td>None</td>
<td>M Trace</td>
</tr>
</tbody>
</table>

### Financial Dashboard for July 2010

- **2011 YTD New Awards Total**: $3,331,925
- **Proposed Contracts for July 2010**
  - Total: 20
  - $ Amount: $10,268,291

### Newly Awarded Contracts for July 2010

<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>$300,000*</td>
<td>Charles Isbell</td>
<td>None</td>
<td>Early-Concept Grants for Exploratory Research: Computational...</td>
</tr>
<tr>
<td>NSF</td>
<td>$450,000</td>
<td>Tom Conte</td>
<td>None</td>
<td>Confidence in Manycore/Multi-Core Modeling and Simulation</td>
</tr>
<tr>
<td>NSF</td>
<td>$250,000</td>
<td>Nick Feamster</td>
<td>None</td>
<td>Collaborative Research: Network-Wide Configuration Testing &amp; Synthesis</td>
</tr>
<tr>
<td>Computing Research Association</td>
<td>$143,156</td>
<td>Chris Peikert</td>
<td>None</td>
<td>Algorithms on Codes and Lattices</td>
</tr>
<tr>
<td>NSF</td>
<td>$429,571</td>
<td>Wenke Lee</td>
<td>None</td>
<td>A Foundational and Practical Platform for Host Security</td>
</tr>
</tbody>
</table>

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EndGame Systems
EventBrite
Google
The Home Depot
LexisNexis
Microsoft
NetWitness
Yahoo!
Grants/Gifts Received for July 2010

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Value</th>
<th>PI</th>
<th>Co-PIs</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honda R&amp;D</td>
<td>$50,000</td>
<td>Andrea Thomaz</td>
<td>None</td>
<td>Socially Guided Machine Learning for Humanoid Robots</td>
</tr>
<tr>
<td>NSF</td>
<td>$400,000</td>
<td>Patrick Traynor</td>
<td>None</td>
<td>CAREER: Protecting User Data on Lost, Stolen &amp; Damaged Mobile Phones</td>
</tr>
<tr>
<td>Alcatel-Lucent</td>
<td>$140,000</td>
<td>Blair McIntyre</td>
<td>Maribeth Coleman</td>
<td>The Augmented Reality Browser</td>
</tr>
<tr>
<td>Air Force</td>
<td>$350,000</td>
<td>Ashwin Ram</td>
<td>Mark Riedl</td>
<td>SHOWME: Persuasive Situational Animation</td>
</tr>
</tbody>
</table>

* denotes multi-institutional grant. GT share is $150,000; partners include University of Michigan, University of Maryland and Cornell University.

People@CoC

Chandramowlishwaran, Vuduc Win Best Paper at GT-Hosted IPDPS 2010

Georgia Tech hosted the 24th IEEE International Parallel and Distributed Processing Symposium (IPDPS), April 19-23 in Downtown Atlanta. While nearly 600 people worldwide registered to attend IPDPS, the eruption of the Iceland volcano two days before the start of the conference stranded a quarter of the attendees in Europe. General Chair David Bader (CSE) incorporated innovative social media methods to bridge between the live and remote audiences for a full technical program and successful event.

Ph.D. student Aparna Chandramowlishwaran and Rich Vuduc (both CSE), along with co-author Kathleen Knobe, won the IPDPS Best Paper Award for "Performance Evaluation of Concurrent Collections on High-Performance Multicore Computing Systems." The conference accepts less than a quarter of all papers submitted for presentation; four more from Georgia Tech were presented:

- "Optimizing and Tuning the Fast Multipole Method for State-of-the-Art Multicore Architectures," by Chandramowlishwaran, Samuel Williams, Leonid Oliker, Ilya Lashuk (CSE), George Biros (CSE) and Vuduc
- "Speculative Execution on Multi-GPU Systems," by Gregory Diamos (ECE) and Sudhakar Yalamanchili (ECE)
- "Dynamically Tuned Push-Relabel Algorithm for the Maximum Flow Problem on CPU-GPU-Hybrid Platforms," by Zhengyu He (ECE) and Bo Hong (ECE)
- "PreDatA – Preparatory Data Analytics on Peta-Scale Machines," by Fang Zheng (CS), Hasan Abbasi (CS), Ciprian Docan, Jay Lofstead (CS), Qing Liu, Scott Klasky, Manish Parashar, Norbert Podhorszki, Karsten Schwan (CS) and Matthew Wolf (CS)

Additionally, Bader served as co-chair of the co-located 9th IEEE High Performance Computational Biology (HiCOMB) workshop, and general chair of the co-located 19th IEEE Heterogeneity in Computing Workshop (HCW). Biros served on the IPDPS 2010 Program Committee. Ada Gavrilovalskia (CS) served on the program committee of the 10th Workshop on Communication Architecture for Clusters. Schwan served as the workshop co-chair of the 6th Workshop on High-Performance, Power-Aware Computing (HPPAC). Jeffrey Vetter (CSE) served as the workshop co-chair of the 4th Workshop on Multithreaded Architectures and Applications (MTAAP), and Bader served on its program committee. Vuduc served as panel...
moderator for this year's topic, "Unconventional Wisdom in Multicore Computing." Finally, Ph.D. student Nova Ahmed (CS) was selected to present her research, "A Path Based Reliable Middleware Framework for RFID Devices," at the IPDPS Ph.D. forum.

More CoC-related papers appeared at IPDPS' co-located workshops:

• HICOMB: "A Tile-based Parallel Viterbi Algorithm for Biological Sequence Alignment on GPU with CUDA," by Zhihui Du, Zhaoming Yin (CSE) and Bader
• MTAAP: "Large Scale Complex Network Analysis using the Hybrid Combination of a MapReduce cluster and a Highly Multithreaded System," by Seunghwa Kang (ECE) and Bader
• MTAAP: "Massive Streaming Data Analytics: A Case Study with Clustering Coefficients," by David Ediger (ECE), Karl Jiang (CSE), Jason Riedy (CSE) and Bader

Bader is an IPDPS Steering Committee member and chairs the 25th silver anniversary committee for next year's symposium, to be held May 16-20, 2011, in Anchorage, Alaska.

Vazirani Lectures at Max Planck ADFCOS 2010

Vijay Vazirani (CS) was a featured speaker at the 11th Max Planck Advanced Course on the Foundations of Computer Science (ADFCOS), held Aug. 2-6 in Saarbrücken, Germany. Vazirani spoke on "From Traditional to Novel Market Models: An Algorithmic Perspective." The ADFCOS summer school is part of the activities of the Algorithms and Complexity Group and the International Max Planck Research School of the Max Planck Institute for Informatics. The purpose is to introduce young researchers to current research topics in theoretical computer science. Vazirani said the event enjoyed record attendance this year, with more than 100 attendees from around the world.

Ram Talks Artificial Intelligence in ICCBR 2010 Keynote

Ashwin Ram (IC) delivered the keynote address at the 18th International Conference on Case-Based Reasoning (ICCBR), held July 19-22 in Alessandria, Italy. In his address, Ram advocated using real-time case-based reasoning in designing artificial intelligence for gaming, rather than character-level or game-level AI. At the conference, Ram also chaired a workshop that focused on the merits and challenges of creating a technology startup out of cutting-edge research in academia or research labs. Finally, Ram and his students and collaborators presented three papers at ICCBR-related workshops:

• "Conversational Framework for Web Search and Recommendations," by Saurav Sahay (CS) and Ram
• "Meta-Level Behavior Adaptation in Real-Time Strategy Games," by Manish Mehta (HCC), Santiago Ontañón and Ram
• "MMPM: a Generic Platform for Case-Based Planning Research," by Pedro-Pablo Gómez Martín, David LLansó, Marco Antonio Gómez Martín, Santiago Ontañón and Ram

Riedl, Ram, Isbell Co-Chair AAAI Workshop on 'AI & Fun'

As part of the lead-up to the Association for Advancement of Artificial Intelligence (AAAI) 2010 conference, Mark Riedl (IC) chaired a workshop on "AI & Fun: Research Directions," with help from co-chairs Ashwin Ram and Charles Isbell (both IC), July 11 in Atlanta. The workshop aimed to bring together a spectrum of researchers working on and thinking about the role of AI in creating engaging, entertaining, "fun" experiences. Additionally, the workshop, which consisted of paper presentations, and invited talks, provided for discussions between participants on significant challenges of the emerging field.

Isbell Selected to USG Executive Leadership Institute

Associate Dean Charles Isbell (IC) is one of 72 individuals selected from the University System of Georgia to participate in its Executive Leadership Institute (ELI). According to the Board of Regents, the institute was created to address the Regents' Strategic Goal Six, "Increasing Efficiency Working as a System," by building a leadership culture. ELI offers a 100-hour program, conducted by leading experts in leadership, to prepare for potential high-level advancement within the system. The program includes group learning, 360-degree assessments, cross-learning opportunities, alumni activities, evaluations and job shadowing.

GVU Has Strong Showing at SIGGRAPH 2010

The GVU Center was well represented at SIGGRAPH 2010, the premier conference and exhibition on computer graphics and interactive techniques, held July 27-29 in Los Angeles. In addition to accepted papers, Chris Wojtan (IC) and Nils Thuerey's (ETH Zürich) image from their paper, "A Multiscale Approach to Mesh-Based Surface Tension Flows" (by Thuerey, Wojtan, Gross and Greg Turk (IC)), was chosen for the front cover of the Proceedings for the SIGGRAPH 2010. This is the first SIGGRAPH cover image from Tech. GVU also held a reception for friends and alumni visiting the conference, July 27 at the Westin Bonaventure Hotel.

CS Ph.D. Student Lei Wang to Speak at China Theory Week
Ph.D. student Lei Wang (CS) has been invited to speak at China Theory Week, to be held Sept. 12-17 and hosted by the Institute for Theoretical Computer Science at Tsinghua University, Beijing. This one-week academic workshop, held every year since 2007, is meant to provide a platform for top CS theory students from institutions worldwide to meet and present their research. Approximately 25-30 students are invited each year. Wang's talk, “Single Parameter Combinatorial Auctions,” will address truthful mechanism design for combinatorial auctions with single parameter agents and its application in Google's TV ad auction. Wang is advised by Vijay Vazirani (CS).

GVU Supports 'ON YOU 2' Exhibition at Museum of Design Atlanta
GVU supported the "ON YOU 2" wearable electronics exhibitions, featuring work by Thad Starner (IC) and instructor Clint Zeagler of Industrial Design. The exhibition took place at the Museum of Design Atlanta, June 11 through Aug. 14. Check out video demonstrations of the controls and fashions of wearable electronics on YouTube.

Six Students Receive ARC Fellowships for 2010-11
The Algorithms & Randomness Center (ARC) and ThinkTank recently announced the winners of its fellowships for the 2010-11 year. The recipients, mentors and their proposed projects include:

- Farbod Shokrieh, Math/ACO, "A Torelli Theorem and a New Set of Invariants for Graphs" (mentor Matt Baker, Math)
- Stas Minsker, Math, "Plug-in Approach to Active Learning" (Vladimir Koltchinskii, Math)
- Karthik Chandrasekaran, CS/ACO, "The Complexity of Cutting Plane Methods for Random Integer Programs" (Santosh Vempala, CS)
- Qie He, ISYE, "A Polyhedral Study of Stochastic Integer Programming" (Shabbir Ahmed and George Nemhauser, ISyE)
- Vinod Cheriyan, ISyE, "A Model of Asset Price Bubbles that Shows Chaotic Dynamics" (Anton J. Kleywegt, ISYE; Federico Bonetto, Math)
- Ying Xiao, CS/ACO, "Tensors and Random Constraint Satisfaction Problems" (Vempala)

This year's winners were selected by a panel including Prasad Tetali (chair, Math and CS), Vladimir Koltchinskii (Math), Milena Mihail (CS), Sasha Boldyrev (CS), Bill Cook (ISyE) and Ton Dieker (ISyE). More information will be posted on the ARC website.

Vuduc Co-Organizes DOE Workshop on Autotuning
Rich Vuduc (CSE) co-organized the Department of Energy-sponsored workshop on autotuning for petascale and future exascale systems, jointly with Kathy Yelick (UC Berkeley) and Jack Dongarra (University of Tennessee, Knoxville). This fourth annual meeting featured talks, panels and discussion sessions among many of the prominent parallel computing research centers, including UIUC, Berkeley, MIT and the DOE national laboratories, as well as industrial researchers and developers from Intel, NVIDIA, IBM and Cray. Topics ranged from next-generation compiler technology based on autotuning techniques to methods for automated parallel algorithm and code derivation.

Goodman Spends Busy Summer Talking Cyber Security
Seymour Goodman (CS) delivered the opening keynote, "Emerging Strategic Technologies of the 21st Century," at the conference on "Strategic Technologies and Our Global Future" held at the Geneva Centre for Security Policy in Switzerland, April 14-16. Goodman also delivered the opening overview presentation at the Workshop on International Cooperation Toward Cyber Security, hosted by the Elliott School of International Affairs at George Washington University in Washington, May 13. In addition to those headlining engagements, Goodman was an invited participant at three cybersecurity-related events, all in Washington:

- "Cyber Security through a Behavioral Lens," I3P Workshop, Capitol Hill, July 22-23
- "Workshop on the National Risk Estimate (NRE) for the Communications Sector," Homeland Infrastructure Threat and Risk Analysis Center (HITRAC, DHS), July 27


Personnel Announcements
Michael Terrell has joined CoC as an Academic Advisor I in CSE effective 5/14/10. His email address is mterrell@cc, phone number is 5-8529 and is located in KACB 1321. Welcome Michael!
**Gregory Anderson** has joined CoC as a Tech Temp in Facilities effective 5/19/10. His email address is ganderso@cc, phone number is 5-2298 and is located in KACB 1219. Welcome Gregory!

**Kemonta "Ke" Gray** has been hired permanently as an Academic Assistant I in the Office of Graduate Programs effective 6/21/10. His email address is kgray@cc, phone number 5-8100 and is located in CCB 302. Congratulations Ke!

**Jennifer Bright** has joined CoC as a Tech Temp in CSE effective 6/14/10. Her email address is jibright@cc, phone number is 4-8965 and is located in KACB 1128. Welcome Jennifer!

**Zvi Galil** is now John P. Imlay, Jr. Dean of Computing. His email address is galil@cc, phone number is 4-4222 and is located in the Dean's suite of CCB.

**Lometa Mitchell** is now the Administrative Manager I for the School of Computational Science and Engineering and oversees all aspects of HR for the School. Congratulations Lometa!

**Alexander Hood** has joined CoC as a Tech Temp in Student Services effective 7/12/10. His email address is ahood@cc. Welcome Al!

**Julia Svoboda** has joined CoC as a Post-Doc in IC effective 7/9/10. Her email address is jsvoboda@cc and is located in TSRB. Welcome Julia!

**Jiten Chhabra** has joined CoC as a Temporary Research Scientist I in IC effective 7/14/10. Email address is jchhabra@cc and is located in TSRB. Welcome Jiten!

**Edmond Chow** has joined CoC as an Associate Professor in CSE effective 8/16/10. His email address is echow@cc and is located in KACB 1336. Welcome Edmond!

**Prasad Raghavendra** has joined CoC as an Assistant Professor in CS effective 8/15/10. His email address is praghave@cc, phone number is 5-3353 and is located in KACB 2134. Welcome Prasad!

**Alenka Zajic** has joined CoC as a Visiting Assistant Professor in CS effective 8/15/10. Her email address is azajic@cc, phone number is 5-6604 and is located in KACB 2336. Welcome Alenka!

Bryan Payne's last day at CoC was 6/19/10.

Ashwin Lall's last day at CoC was 7/1/10.

Gagan Goel's last day at CoC was 7/6/10.

Xiapu (Daniel) Luo's last day at CoC was 7/31/10.

Roberto Perdisci's last day at CoC was 8/4/10.

Nate Clark's last day at CoC was 8/6/10.

Mike Hunter's last day at CoC was 8/9/10.

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**General News**

**Google's Michael Jones to Keynote FutureMedia 2010**

Michael Jones, chief technology advocate for Google, will deliver the opening keynote at FutureMedia Fest 2010, scheduled for Oct. 4-7 on the Georgia Tech campus. The four-day exploration and celebration of digital media, now in its second year, will feature a range of discussions exploring the impact of next-generation digital, social, mobile media and the Internet on education, health, enterprise and government. Nearly 60 speakers from industry, academia, government and news media are scheduled to speak. Registration is now open; for more information, visit the FutureMedia Fest 2010 website.

**GTISC Security Summit Returns to Examine 'Evolving Threats'**

After a one-year hiatus, the GTISC Security Summit returns in 2010 with a focus on the "Evolving Nature of Cyber Security Threats," Oct. 7 in the Ferst Center for the Arts. Howard Schmidt, current White House cybersecurity coordinator and former Professor of the Practice in CoC, is scheduled to deliver the summit's keynote. He will be followed by a panel discussion of security experts from government, industry and academia, to be moderated by Distinguished Professor Rich DeMillo (CS). The 2010 Security Summit is being held in conjunction with FutureMedia Fest 2010 (see item above) and will constitute the FutureMedia morning session on Oct. 7. For more information, visit the GTISC website.

**RIM Center Sets Seminar Schedule for Fall Semester**

The RIM Center has released its schedule of fall seminars. Unless otherwise noted, all seminars are held on Tuesdays at noon in the Marcus Nanotechnology Building (location will be finalized closer to the seminar date). An abbreviated schedule with the general subject of each seminar is below; for more information, visit the RIM website.

**Sept. 8, Henrik Christensen** (IC), Georgia Tech (U.S. Roadmap for Robotics)
Oct. 6, Jaydev Desai, University of Maryland (medical robotics)
Oct. 15 (Friday), Reid Simmons, Carnegie Mellon University (social mobile robotics)
Oct. 28 (Thursday), Takeo Kanade, Carnegie Mellon University (quality-of-life technology)
Nov. 10, Siddhartha Srinivasa, Intel Research / CMU (vision and learning)
Nov. 17, Raj Madhavan, University of Maryland / NIST (vision and learning)
Nov. 23 (Tuesday), Katherine Kuchenbecker, University of Pennsylvania (haptic systems)

GTISC Dismantles Revived Kraken Botnet
Researchers at GTISC recently shuttered the latest iteration of the Kraken botnet after months of collaboration with dynamic DNS service operators, hosting providers and law enforcement. At a peak of 650,000 machines, Kraken was one of the largest and most difficult-to-detect botnets of 2008. By mid-2009 it was offline due to a concerted industry response, but earlier this year Kraken was reborn 320,000 nodes strong, bootstrapped by an installation botnet offered as a criminal service. By repeatedly attacking the botnet's infrastructure at multiple levels, Kraken was once again offline as of July 1.

TSO Secures IBM Grant to Upgrade Backup Services
In May TSO secured an IBM grant for $68,861 to support backup services for enterprise and research servers, a customer need identified in the recent TSO faculty survey. The equipment from the grant will be used to replace the 2003 backup strategy for research systems with a new IBM SAN-based solution that will integrate into the existing tape backup architecture already in place for enterprise systems. The SAN will provide incremental backups over a 30-day period and one full backup that will be migrated to tape for off-campus storage as a disaster-recovery option. The implementation of this hardware will provide a needed upgrade and improved restore time for approximately 200 faculty and 700 graduate students. This is the second IBM grant secured by TSO, bringing the total contributions for FY10 to $92,368. The first grant included servers for Drupal, SVN and wiki.

GVU Starts School Year with Retreat, Ice Cream Social
The GVU Faculty Retreat took place on Aug. 17 at Paris on Ponce. The daylong retreat started with Director Beth Mynatt's presentation about the current state of the GVU Center. After her presentation, retreat participants—51 GVU faculty from across Georgia Tech—discussed three major topics: large campus activities and how GVU can best support campus-scale activities; new research initiatives and how GVU can support emergent research leadership; and out-of-box thinking, including how GVU can support new research at the edge.

On Aug. 26, GVU hosted its traditional Ice Cream Social to welcome back students and faculty and kick off the GVU Brown Bag series. Mynatt used the event to give new students a short overview of GVU's activities and to call for submissions for the Foley Scholars Fellowships.

Women@CC Welcomes Newest Women to Campus
The W@CC, Women at the College of Computing, want to extend a warm welcome to CoC's incoming freshman class. W@CC is all about supporting the female computing undergraduate population with social and professional opportunities. Come meet current members during the second week of school for a night at the Fox, Tech's Craft Center and mini-spa day. For more information about dates and times, email Candis Pham or Susan Storey.

TSO to Host Brownbag on Information Security
On Monday, Sept. 27, TSO will host a brownbag information session on "Personal Information Technology Safety and Security," at noon in Klaus 1116E. Speakers will provide tips for staying safe and secure with modern technology, covering topics such as the use of wireless networks outside of Georgia Tech, social networking sites like Facebook, and Bluetooth. All CoC faculty, staff and students are invited. For more information, email the TSO Help Desk.

CoC In the News
To help Compiler readers stay informed of the latest media coverage of the College of Computing, we will begin sharing the month's headlines from the CoC website. Below are links to all headlines from May 1 to Aug. 31, 2010 (most recent headlines at the top).

August

http://www.cc.gatech.edu/compiler/
- **Tweens & Technology: The Tiny Power Shoppers**
- **Watching the Suspicious Behavior of Spam**
- **Nick Feamster Recognized by MIT Technology Review's Prestigious TR35 Listing of the World's Top Young Innovators for 2010**
- **Researchers Developing Computerized Tool for Autism Diagnosis, Care**
- **NSF Announces New Expeditions in Computing Awards**
- **Two Georgia Tech Students Named Department of Energy Graduate Fellows**
- **NVIDIA Names Georgia Tech a CUDA Center of Excellence**
- **Spotting Autism With Computers**
- **NSF Awards $10M to Develop Computing Techniques for Measuring and Analyzing Child Behavior**
- **Georgia Tech to Host FutureMedia Fest 2010**
- **Step 1: Post Elusive Proof. Step 2: Watch Fireworks.**
- **Flexible Routing in the Cloud**
- **Collage Combats Censorship by Hiding Text in Images**
- **Million-Dollar Problem Cracked?**
- **Initial Trials on New Ovarian Cancer Tests Exhibit Extremely High Accuracy**
- **Hiding Files In Flickr Pics Will Fool Censors.**
- **Developer Preview of AR Browser Kamra Now Available**
- **Malware Threat Outpaces Antivirus Software**

**July**

- **The Limits of GPUs**
- **Study To Analyze Whether Tweets Are All Noise**
- **Personal Robots: Newest CS1 Teaching Tool**
- **GT Student Pens New Book for Kids**
- **Has the Robot's Day Finally Arrived?**
- **Send in the Robots**
- **Chris Klaus Gets Intro from Dean Gall at Alumni Event**
- **Reality Gets a Makeover**
- **Researchers Tout New Weapon in Internet Censorship Arms Race**
- **Flash on College Websites May Pose Security Risk**
- **The Ongoing War Against Cybercrime**
- **HP Bestows 3rd Annual Research Innovation Awards**
- **Qualcomm Unveils AR Platform for Google Android Phones**
- **Students, Meet Your New Teacher, Mr. Robot**
- **Rafael Bras Named Georgia Tech Provost**
- **Will Qualcomm's Augmented Reality Play Augment Its Business?**
- **Georgia Tech, Qualcomm Form Game Studio**
- **Notorious Kraken Botnet Rises From the Ashes**
- **Kraken Botnet Making a Resurgence**

**June**

- **Kraken Botnet Reemerges 318,000 Nodes Strong**
- **Working Toward a Smarter, Faster Cloud**
- **GPU Computing II: Where the Truth Lies**
- **Robin Thomas Earns Distinction, Named Regents' Professor**
- **New Tech Moves Beyond Mouse, Keyboard & Screen**
- **Skribit Founder Joins Notifo as Co-Founder**
- **How Does a Terminator Know When to Not Terminate?**
- **Intel Pivots to Supercomputing Defense**
- **Georgia Tech Students Show Their Game, 'Vision by Proxy,' at E3**
- **Schwan Named Computing's 6th Regents' Professor**
- **Kids Experiment With 'Video Playdates'**
- **Students Aim for a 'Milestone' at the Dare to Be Digital Video Game Competition**
- **ACO/Machine Learning Work Nets Balcan NSF CAREER Award**
- **Kamra: First Open, Standards-Based Mobile Browser**
- **Vuduc Earns NSF CAREER Award for Autotuning Research**
- **BrainLab Looks for Keys for Locked-In Patients**
- **Drinks on 5th With Chris Klaus**
- **CS Senior Earns Award for Autism Advocacy**
- **Saving Lives With Ethical (Robot) Soldiers**
- **‘Bonsai’ Best Paper for Peikert**
May

- Are Terminators Real?
- Willow Garage Gets Robots in Researchers' Hands
- PhD Student PADS Resume With Best Paper Award
- Grow Your Own AR Garden
- Military Robots Seen as Lifesavers
- Study Shows New Way to Stop Blood Clots
- Meet Simon, the Social Robot
- IT Workers Teach, Learn in Georgia High Schools
- Orso Wins Microsoft Software Engineering Award
- Solution for African Health Data is BLIS
- Operation Reboot: IT Pros Become CS Teachers
- Georgia Tech Students Sweep Health IT Coding Challenge
- Aware Home Getting a 'Rosie the Robot' Helper
- GT Researchers Tackle Smartphone Security