**Picture(s) of the Month**

**Sting Racing, Wrapped**

The Georgia Tech Sting Racing team made it to the top 35 contenders in the DARPA Urban Grand Challenge semi-finals this month in Victorville, California with Sting 1, their autonomous Porsche Cayenne. Sting 1 is shown here in full competitive “dress” courtesy of team partners, SAIC.

See More College of Computing Photos on the Website

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**Research News**

**Proposed Contracts for September 2007**

<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>$65,000</td>
<td>Charles Isbell, Jr.</td>
<td>Irfan Essa</td>
<td>Collaborative Research: Persistent Adaptive Collaborative Synthespans</td>
</tr>
<tr>
<td>NSF</td>
<td>$251,828</td>
<td>Haesun Park</td>
<td>None</td>
<td>MSPA-MCS: Collaborative Research: Fast Nonnegative Matrix Factorization</td>
</tr>
<tr>
<td>NSF</td>
<td>$20,000</td>
<td>Thad Starner</td>
<td>None</td>
<td>IEEE ISWC 2007: International Symposium on Wearable Computers</td>
</tr>
<tr>
<td>US Dept of Education</td>
<td>$102,000</td>
<td>Michael McCracken</td>
<td>Anthony Yezzi</td>
<td>Atlas-Atlantic Masters in Electrical-Computer Engineering and Computer</td>
</tr>
<tr>
<td>NSF</td>
<td>$420,900</td>
<td>Charles Isbell, Jr.</td>
<td>Maureen Biggers</td>
<td>Cpath EAE: Extending Contextualized Computing in</td>
</tr>
</tbody>
</table>

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**Numbers & Stats**

**19,417**

Total number of credit hours for CoC students for Fall 2007

**2nd**

Place (in 58 teams) awarded to the gtACM Yellow Jackets at this year’s ACM Regional Programming Contest

**160+**

Number of media outlets that covered the GTISC Emerging Cyber Threats Report

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**YTD New Awards**

$5,445,330

**Newly Awarded Contracts for September 2007**

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**Event Spotlight**

November 1
CSE Distinguished Lecture - Tandy Warnow
KACB 2443

November 10-11
GT Gamefest Fall 2007
Klaus Building (classroom wing)

November 13
GTISC Industry Leaders Lecture Series: Tony Rutkowski
Century Building

November 22-23
Thanksgiving Break
Georgia Tech Closed

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http://www.cc.gatech.edu/compiler/
### Multiple Institutions

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<tbody>
<tr>
<td>Ga Sec of State Elect</td>
<td>$100,000</td>
<td>Jonathon Giffin,</td>
<td>Richard Lipton</td>
<td>A Security Study of E-Voting Related Operational Processes of Georgia Elect</td>
</tr>
<tr>
<td>NSF</td>
<td>$172,670</td>
<td>Gabriel Loh</td>
<td>None</td>
<td>Economic Mechanisms for Dynamic Resource Partitioning in Multi-Core Process</td>
</tr>
<tr>
<td>NSF</td>
<td>$342,000</td>
<td>Alessandro Orso,</td>
<td>Mary Jean Harrold</td>
<td>Collaborative Research: SOD-Team: Designing Tests for Evolving Software</td>
</tr>
<tr>
<td>NASA/Ames Research Center</td>
<td>$30,000</td>
<td>David Bader</td>
<td>None</td>
<td>GSRP/MADDURI: Performance Analysis and Optimization of the NASA Scientific</td>
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<tr>
<td>NSF</td>
<td>$178,846</td>
<td>Haesun Park</td>
<td>None</td>
<td>Collaborative Research: Greedy Approximations with Nansubmodular Potential</td>
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<tr>
<td>NSF</td>
<td>$33,710</td>
<td>Keith Edwards</td>
<td>None</td>
<td>Computer Supported Cooperative Work Doctoral Research Consortium</td>
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<tr>
<td>NSF</td>
<td>$18,000</td>
<td>Elizabeth Mynatt</td>
<td>None</td>
<td>CT-T: Collaborative Research: Logic and Data Flow Extraction for Live and ...</td>
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<tr>
<td>NSF</td>
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<td>Keith Edwards</td>
<td>None</td>
<td>Workshop: UIST 2007 Doctoral Symposium</td>
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<td>NSF</td>
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<td>Melody Jackson</td>
<td>None</td>
<td>HCC: Evoked-Response Direct Brain Interface for Continuous Control</td>
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<td>NSF</td>
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<td>Vijay Vazirani</td>
<td>None</td>
<td>RI: Interference in Large-Scale Graphical Models</td>
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<tr>
<td>NSF</td>
<td>$85,325</td>
<td>Beki Grinter</td>
<td>None</td>
<td>Algorithms and Markets</td>
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<tr>
<td>NSF</td>
<td>$220,000</td>
<td>Wenke Lee</td>
<td>None</td>
<td>HCC-SGER Project Description: HCI4D, Understanding Human Centered Design</td>
</tr>
<tr>
<td>NSF</td>
<td>$199,887</td>
<td>Gregory Abowd</td>
<td>None</td>
<td>SGER: Technologies to Support Early Detection of Development Delay in Child</td>
</tr>
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### Closed Contracts for September 2007

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<tr>
<td>NSF</td>
<td>$1,647,747</td>
<td>Gregory Abowd</td>
<td>Rogers, Mynatt, Essa, Bobick</td>
<td>ITR/SY: The Aware Home: Sustaining the Quality of Life for an Aging</td>
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<tr>
<td>NASA/Ames Research Ctr</td>
<td>$24,000</td>
<td>David Bader</td>
<td>None</td>
<td>GSRP/K. Madduri: Performance Analysis and Optimization of NASA Scientific</td>
</tr>
<tr>
<td>NSF</td>
<td>$1,988,025</td>
<td>Mustaque Ahamad</td>
<td>Omiecinski, Pu, Liu, Mark</td>
<td>ITR/SI: Guarding the Next Internet Frontier, Countering Denial of ...</td>
</tr>
<tr>
<td>NSF</td>
<td>$28,000</td>
<td>Haesun Park</td>
<td>None</td>
<td>Special Meeting: Workshop on Future Direction Innumerical Algorithms and ...</td>
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<tr>
<td>University of</td>
<td>$228,003</td>
<td>Mary Jean</td>
<td>None</td>
<td>National Center for Women</td>
</tr>
</tbody>
</table>

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

- Apple, Inc.
- Cisco Systems, Inc.
- Eaton Corporation
- Google, Inc
- IBM Corporation
- Lockheed Martin
- Corporation Fnd.
- Presbyterian Homes of Georgia, Inc.
- Secure Computing
GTISC Issues 2008 Report on Cyber Security Threats and Countermeasures

More than 200 corporate executives, industry leaders and technologists from across the country attended the GTISC Security Summit on Emerging Cyber Security Threats and Countermeasures Summit, keynoted by Dr. Vint Cerf, vice president and chief Internet evangelist at Google. Following Cerf's address on the continued research and development needs to secure the multi-layered systems of the Internet, Summit panelists engaged in a lively discussion moderated by Chris Rouland, chief technology officer of IBM Internet Security Systems and IBM distinguished engineer. The report was covered by more than 160 media outlets.

Watch the video and read more

Computer Architecture Researchers to Dominate Spring Conferences

The combined efforts of faculty and graduate students have resulted in the acceptance of six peer-reviewed papers at the two most important conferences this coming spring (2008) in the computer architecture field. The IEEE International Symposium on High-Performance Computer Architecture (HPCA) and the ACM International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS) will showcase the following papers:

(HPCA)
“Performance-Aware Speculation Control Using Wrong Path Usefulness Prediction”, Chang Joo Lee, Hyesoon Kim, Onur Mutlu, Yale N. Patt
“PEEP: Exploiting Predictability of Memory Dependences in SMT Processors”, Samantika Subramaniam, Milos Prvulovic, Gabriel Loh
“Single-Level Integrity and Confidentiality Protection for Distributed Shared Memory Multiprocessors”, Brian Rogers, Chenyu Yan, Siddhartha Chhabra, Yan Solihin, Milos Prvulovic (ASPLOS)
“Improving the Performance of Object-Oriented Languages with Dynamic Predication of Indirect Jumps”, Jose A. Joao, Onur Mutlu, Hyesoon Kim, Rishi Agarwal, Yale N. Patt

Visit the HPCA Website
Visit the ASPLOS Website

People@CoC

Peter Freeman – International Man of Activity
Peter A. Freeman, Dean Emeritus and Founding Dean of the College of Computing from 1990
to 2002 has been active recently in the current capacities:

- He is serving on the External Advisory Board of the Department of CS at Johns Hopkins and College of Engineering at Clemson University.
- He is serving on the GENI Project Management Advisory Board of the GENI Project Office.
- He gave a keynote on October 20 at a student-organized Software Engineering Conference at the University of Houston.
- He was presented with the Richard A. Tapia Achievement Award for Scientific Scholarship, Civic Science, and Diversifying Computing.
- Received the Computing Research Association (CRA) Distinguished Service Award.
- Gave this year's first Dean's Lecture at the Golisano College of Computing and Information Sciences at the Rochester Institute of Technology on September 21.
- Was asked in September to join the ACM Distinguished Speaker's Program.

View Professor Freeman's Website

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Mike Hunter and Russ Clark Receive Visit from Dr. Arata Koike of NTT

College of Computing's Mike Hunter and Russ Clark received a visit from Dr. Arata Koike of NTT Labs. Dr. Koike was interested to see the work that GTISC and the RNOC are doing in VoIP, specifically with respect to the IMS lab and the associated IMS competition. The E-Democracy group has been progressing well and has two active projects: A political information visualization tool that leverages web science concepts called "PolitCrunch" and a minimal voting machine project designed to demonstrate how efficient software could reduce voting machine complexity (and thus reduce problems).

Mustaque Ahamad Attends Digital Identity Systems Workshop

Director of Georgia Tech Information Security Center Mustaque Ahamad attended a one-day workshop on Digital Identity Systems Workshop at Polytechnic University in Brooklyn, New York on September 20. The workshop was supported by Microsoft Corporation. Some of the topics for discussion were as follows: abuse of digital identity, identity theft, on-line fraud, and other types of cybercrime. The goal of the workshop was to examine the issues and technologies that will foster the development and deployment of digital identity systems, with a focus on the system and infrastructure level not point technologies.

View the Conference Website

Nick Feamster's Paper to Appear in HotNets 2007

Assistant Professor Nick Feamster's paper will appear in HotNets 2007 Workshop on Internet accountability, called "Holding the Internet Accountable", which describes how certain architectural changes to the Internet can prevent certain types of Internet attacks (e.g., spoofing, route hijacking, etc.). A paper "Filtering Spam with Behavioral Blacklisting" is appearing at ACM CCS 2007 next week. Nick also gave a department-wide colloquium at USC last week on this topic.

View Workshop Website

John Stasko's Group to Present Four Papers at IEEE InfoVis Conference and IEEE VAST Symposium

The Information Interfaces Research Group, led by Professor John Stasko is going to present four papers at the upcoming IEEE Information Visualization (InfoVis) Conference and the IEEE Symposium on Visual Analytics Science and Technology (VAST). Stasko is also the General Chair of the InfoVis Conference. The conferences are jointly being held in Sacramento, CA from October 28 to November 1, 2007.

View InfoVis 2007 Website
View VAST 2007 Website

David Bader Invited to IBM's Customer Advisory Council

Associate Professor David A. Bader has been invited to a meeting with IBM's Customer Advisory Council for Cell based systems and Multicore Acceleration concept. He will be exchanging ideas with other executives and managers who are IBM customers and will have influence over the development of new Cell /B.E. based solutions. IBM's Optimized Workload System's team is planning on initiating the council to foster a stronger business relationship with their customers and gain early feedback on next product revision to aid faster implementation and resolution of problems.

View the Publication on the National Academies Press Website
Seymour Goodman Publishes Papers on Cyberspace Security and Global Information Technology Management

Seymour E. Goodman, Professor-Joint with the Sam Nunn School of International Affairs has presented two papers this October. “Toward a Safer and More Secure Cyberspace” was published in Communications of the ACM and “Identify and Mitigate the Risks of Global IT Outsourcing” was included as Editorial Preface in The Journal of Global Information Technology Management (GJITM).

Personnel Announcements

John Cortese has joined CoC as a Sr. Research Scientist in IC effective 9/24/07.
Alan Glass will be joining CoC as a Tech Temp in Student Services effective 9/25/07. His email address is aglass@cc, phone number is 5-4267, and will be located in CCB 122.
Carla Zachery’s last day at CoC was 9/17/07.
Kenton Lyon’s last day at CoC was 9/21/07.
Sanjay Chandrasekharan’s last day at CoC was 9/1/07.
Robert Iannucci’s last day at CoC is 9/24/07.
Tobias Lang’s last day at CoC is 9/24/07.
Mark Riedl has joined CoC as an Assistant Professor in the School of Interactive Computing starting 11/1/07. His email is riedl@cc, his phone number is 5-2860, and he is located in TSRB 220.

Administrative News

Board of Regents Approves New CSE Ph.D. To Be Offered Fall ‘08

During its October meeting at West Georgia College in Carrollton, the Board of Regents of the University System of Georgia approved a new doctoral degree in Computational Science and Engineering (CSE) for the College of Computing.

Find a Job (or Post One) on the CoC Website

Did you know you can easily search for relevant jobs on the CoC Job Opportunities page? Quick links let you sort jobs by student, staff or faculty opportunities, and a link to a job submission form is always available.

Informational Mailing Lists for Undergrads

Three opt-out mailing lists have been created to help get the word out about important, but not critical, information for undergrads. All students can opt-out or in here.

- NEWS - newsandevents@cc
  Any event you want to broadcast to undergraduates should go to this email and NOT undergraduates@cc. List owner: Communications.

- JOBS - jobs@cc
  This list automatically receives jobs that get posted to the CC website under Inside the College > Jobs. List owner: Communications.

- MONEY - financialhelp@cc
  This list is for distributing scholarship, fellowship, and other financial aid/help materials that come through for undergrads. List owner: Student Services.