



**Nov 8 -14, 2009**

**CCT to Feature “Green” Booth, University Research at Supercomputing 2009 in Portland, Oregon**

CCT researchers will present University research enabled through high-performance computing systems, high-speed networking, advanced software and innovative computational applications during the annual Supercomputing Conference, Nov. 14-20 in Portland, Oregon.

CCT will host a booth during the exhibition portion of the conference, Nov. 16-19, to show different projects underway in departments across LSU that use supercomputing to develop solutions for real-world problems.

Supercomputing 2009, the premier international conference on high-performance computing and its related tools, technologies and applications, is a “green” conference, so CCT will have a sustainable booth, distributing information electronically and displaying reusable posters that describe major research projects CCT faculty led in the past year.

The booth has a digital screen and video-on-demand setup to show short movies of LSU research conducted through high-performance computing. Famper, a creation of the LSU Robotics Research Laboratory in the Department of Computer Science, will be in the CCT booth. Famper is a small robot designed to climb through pipelines and remotely send back data. During SC, visitors can watch Famper crawl through pipes and send back live video.

The booth also will feature information on the Louisiana Optical Network Initiative, or LONI, and its contributions to TeraGrid in the past year. TeraGrid incorporates supercomputing resources from 11 partner sites around the country, including LONI, a high-speed, fiber optic network that connects supercomputing resources among Louisiana’s major research institutions. As a TeraGrid partner, LONI has furthered research in various disciplines at other universities and national laboratories.

In other areas of the conference, CCT IT Researcher Steve Brandt will display his “Datacenter of the Future” project in the SC 2009 exhibition, and CCT Research Analyst Andrei Hutanu will make a presentation on network-aware visualization at the SC Ultrascale Visualization Workshop, discussing how high-speed networks such as LONI can help researchers process large data sets quickly and effectively.

“Supercomputing Conference not only highlights the innovative research taking place at LSU, it gives us an opportunity to collaborate with top computational scientists from around the world and learn new ways to apply emerging technologies and software to solve real-world problems in everything from biology and physics to music and the arts,” said CCT Interim Director Stephen David Beck.

### **Pats on the Back:**

- Thomas Sterling will be honored during Supercomputing 2009 as one of five inaugural fellows of the International Supercomputing Conference (ISC.). ISC will present Sterling and the other selected fellows with their awards during a special ceremony at the ISC booth on Monday, Nov. 16, the opening night of the Supercomputing Conference exhibition. A small reception for the recipients will take place after the ceremony. Since ISC 2010, which will take place May 31-June 3, 2010 in Hamburg, Germany, marks the conference’s 25<sup>th</sup> anniversary, the organizers wanted to honor individuals who have made significant contributions to create successful exhibitions and presentations, growing this annual event. Professor Sterling has been involved with ISC since its inception, and is a frequent presenter at the conference. During ISC 2009, Sterling was a conference keynote speaker, and gave a presentation on petaflops scale computing, where machines are capable of running 1,000 trillion calculations per second.
- The ACM South Central Regional Collegiate Programming Contest had 79 teams compete across five sites in Louisiana, Texas and Oklahoma this weekend. LSU was the coordinating site for this competition, and Abilene Christian University, Texas A&M University, LeTourneau University and East Central University all hosted teams in their respective regions. The top team overall was 4/27 Bumpkins, comprised of students from University of Texas - Austin. This team will have a chance to compete in the International Collegiate Programming Contest world finals in early 2010. Gold, a team from LSU, was the highest-ranked Louisiana team, and placed 22nd overall. For a complete list of teams and their rankings, please visit <http://acm2009.cct.lsu.edu/localdoc/scoreboard/finals.html>. Thanks to all those at CCT who assisted in organizing this annual event.
- Professor Thomas Sterling was invited to give the weekly colloquium lecture at the Department of Computer Science at University of New Orleans. Sterling gave a seminar based on a similar recent presentation he delivered at the University of Maryland, “HPC Phase VI – The Final Convergence,” in which he presented results on models of computation and specifically the research on ParalleX being conducted at CCT and LSU Department of Computer Science.
- The University granted permission for the AVATAR undergraduate minor in digital media. This program will officially begin in Fall 2010, but students can start taking classes next semester that will count toward this program.
- Professor Thomas Sterling participated in a multi-institutional pre-proposal meeting

of the Xcaliber project in Denver, Colorado, hosted by Sun Microsystems, with Sandia National Laboratory serving as prime organization. The meeting was in preparation of a DARPA solicitation for the Ubiquitous HPC Program. Sterling represented LSU as a partnering academic institution. Sterling's principal contribution is in the areas of models of computation, low-level application programming interfaces, and runtime systems. Sterling also advises on system and core architectures.

#### **CCT in the News:**

- CCT to Feature 'Green' Booth at SC09

Source: HPC Wire

<http://www.hpcwire.com/topic/applications/CCT-to-Feature-Green-Booth-at-SC09-69572272.html>

Source: Supercomputing Online

[http://supercomputingonline.com/index.php?option=com\\_content&view=article&id=17558:lsu-center-for-computation-a-technology-to-feature-green-booth-university-research-at-supercomputing-2009-in-portland-oregon&catid=15:latest&Itemid=50](http://supercomputingonline.com/index.php?option=com_content&view=article&id=17558:lsu-center-for-computation-a-technology-to-feature-green-booth-university-research-at-supercomputing-2009-in-portland-oregon&catid=15:latest&Itemid=50)

#### **Lectures This Week:**

- Xin Li, Assistant Professor at CCT and Electrical and Computer Engineering, will be organizing this year's CCT Colloquium Series. He is working hard to put together an interesting program for the coming year and would appreciate any input or suggestions. Feel free to contact Xin at [xinli@cct.lsu.edu](mailto:xinli@cct.lsu.edu).

#### **Please Note:**

- The next ALL CCT meeting will take place tomorrow, Wednesday, Nov. 11, in Johnston 338. This meeting will take place at 2 p.m. Please make every effort to attend this very important meeting. The next ALL CCT meeting will be Wednesday, Dec. 16.
- There will be an Introduction to HPC Visualization training this week on Thursday, Nov. 12 from 1:30-3:30 in 338 Johnston. To register or see more details, visit <http://www.hpc.lsu.edu/training>
- This is a reminder about CCT Policy Statement 18, concerning the CCT Training and Conference Room Reservation Policy. Specifically, please note that 338 Johnston is not to be used for LSU academic classes. This and other CCT policy statements are available at: <http://www.cct.lsu.edu/site133.php>
- 342 Johnston Hall has been converted into a large work room/collaborative space to accommodate meetings for groups of approximately 8 to 15 people with white boards. To begin reserving this room for use, please book it on the Meeting Maker

Calendar as "Work Room Johnston 342". The key is available at the receptionist desk in 216 Johnston Hall.

- CCT faculty, staff and students can access pictures from events, conferences and activities from the online photo gallery at <http://www.cct.lsu.edu/site97.php>. These images are CCT property and are available to use for posters, presentations and other needs. Images also are available on CCT's Facebook group page, at <http://www.facebook.com/group.php?gid=2426175266&ref=ts>. This is a public page, and you do not need to have a personal Facebook account to view or access these photos.
- Follow CCT on Twitter for updates on news and breaking information  
<http://www.twitter.com/LSUCCT>
- Please remember to send your news concerning grants, awards, conferences, or other pertinent information that should be communicated to CCT to PR Manager Kristen Sunde at [ksunde@cct.lsu.edu](mailto:ksunde@cct.lsu.edu).

#### **Upcoming Grant Deadlines:**

- EPSCoR Research Infrastructure Improvement Program: Track-2 (RII Track-2)  
November 18 2009 10:00 am  
At Most \$ 2,000,000.00 available  
[http://www.nsf.gov/pubs/2009/nsf09571/nsf09571.htm?govDel=USNSF\\_25](http://www.nsf.gov/pubs/2009/nsf09571/nsf09571.htm?govDel=USNSF_25)
- Note: Please see the CCT deadline Web site, as many NSF deadlines are listed here:  
<http://www.cct.lsu.edu/about/grants/deadlines/events.php>