



Aug. 8-14, 2010

CCT Faculty, Staff and Students Participate in TeraGrid 10 Conference

A wide range of staff from CCT, including faculty, researchers, students, LONI staff, and participants from CCT's first REU program that took place this summer, presented their research at the annual TeraGrid Conference (TG 10), which took place Aug. 2-5 in Pittsburgh, Penn.

All of the students who attended were awarded travel funding support from TeraGrid.

Participants included:

- Gabrielle Allen, who gave a conference keynote address on "Importance of Cyberinfrastructure for Numerical Relativity."
- Honggao Liu served as TG 10 Poster Chair.
- Erik Schnetter gave a tutorial to high school students and undergraduates on the Cactus Framework.
- Steve Brandt gave a Python tutorial to high school students and undergraduates and presented a paper on "Beowulf Bootcamp: Teaching Local High Schools about HPC."
- Eric Seidel (summer REU student at the CCT) presented a paper titled "Simplifying Complex Software Assembly: The Component Retrieval Language and Implementation" and also presented a poster on this work.
- Michael Thomas, undergraduate research student, presented a poster titled "Simulation Factory: Simplified Simulation Management." Michael won the Best Undergraduate Poster award for this, which he created with mentor Erik Schnetter.
- Andrei Hutanu (CCT) and Kenny Welshon (LONI) presented a paper: "Design and Implementation of a Production Dynamically Configurable Testbed."
- Shantenu Jha presented two papers "High-throughput computing of large-scale ensembles on the TeraGrid and DEISA for HIV-1 Protease Simulation" and

"Modeling Data-driven CO2 Sequestration Using Distributed HPC Cyberinfrastructure."

- Ashley Zebrowski presented a poster titled "Automated Task Migration with Cactus and SAGA."
- Oleg Korobkin presented a poster on "Application-Level Debugging and Runtime Visualization Tools for Parallel Simulations within Cactus/Carpet Framework."
- Swathi Dubbaka presented a poster on "Automated System to Construct a Simulated Hurricane Database."
- Kathy Traxler and Bety Rodriguez-Milla mentored a team of students, including high school students, undergraduates from colleges and universities across Louisiana, and participants from the CCT REU summer program, to participate in the Programming Competition at TG10.

CCT faculty and staff also took part in the education program at TeraGrid 2010, assisting with judging student posters.

Pats on the Back:

- Congratulations to the faculty and staff who participated in SIGGRAPH 2010 in Los Angeles. The AVATAR research group presented a poster on their work, and the CCT booth received more than 350 visitors during the conference exhibition.
- Professor Thomas Sterling was invited to visit the Barcelona Supercomputing Center at Polytechnic University of Catalonia July 16-22 to engage in strategic discussions toward future collaborations. During his visit, Sterling presented an invited seminar for students and faculty on "HPC in Phase Change: Toward a New Execution Model."
- Hongchao Zhang received an award from the National Science Foundation titled "The Analysis and Design of Gradient Methods for Large-Scale Nonlinear Optimization and Applications." The award is in the amount of \$141,602 for three years.
- Thomas Sterling received an award from DARPA through Georgia Institute of Technology titled "Chasm: Challenge problems And Scalable Metrics." The award is in the amount of \$750,000 for four years.

Lectures this Week:

- Juana Moreno will be the invited speaker for the Friday Night Lecture Series at Highland Road Park Observatory, a BREC facility at 13800 Highland Road. Moreno's lecture, "The Astounding CCT," will take place at 7:30 p.m. In her talk, she will give an overview of the interdisciplinary research and advanced cyberinfrastructure at CCT. This event is free and open to the public, and after

Moreno's lecture, the observatory will be open for viewing, weather permitting. For more information, please visit <http://www.bro.lsu.edu/index.html>.

Please Note:

- Prior approval is required for Special Meal Requests. Employees who make meal purchases without prior approvals may find that they must cover the cost of any monies spent for an unapproved event out of pocket, especially now that state funds are under a spending freeze. Please contact Susie Poskonka (susie@cct.lsu.edu) prior to any special meal with visitor(s) to file the appropriate request for approval. Prior approval could take up to one week, so please plan accordingly.
- LSU Day, a celebration of the University's sesquicentennial anniversary that highlights the various research and education accomplishments of different areas of campus, will take place on Saturday, Nov. 13, concurrent with LSU Homecoming. This event originally was scheduled for April 24, but the University canceled it because of severe weather. At LSU Day, CCT will host a "Visualize This!" exhibit showcasing student research projects and visualization work in the LSU Union computer laboratory. If you would like to participate, please contact CCT PR Manager Kristen Sunde at ksunde@cct.lsu.edu.
- **Supercomputing Conference 2010 Information and Deadlines:**
 - Follow SC10 with social media to get the latest news, information, and deadlines -- Twitter @ SuperComputing; Facebook group: SC10.
 - The SC10 Broader Engagement Program, which offers students, faculty and professionals from groups traditionally underrepresented in high-performance computing an introduction to SC through networking and technical sessions, is now taking applications. Participants will attend sessions immediately preceding the conference that provide an introduction to and professional development in HPC and computational science. Community building activities include the mentor /protégé program, which matches Broader Engagement and Student Volunteer protégés with self-identified mentors attending SC. As part of the Broader Engagement Program, the SC10 Student Job Fair will take place from 10:30 a.m. to 1:30 p.m. Wednesday, Nov. 17. Applications for participation grants in Broader Engagement are due Aug. 16. Details are available at: <http://sc10.supercomputing.org/?pg=broadeng.html>. For more information, email: be@info.supercomputing.org
 - Applications for Student Volunteers for [SC10](#) are now being accepted. The deadline to apply is Sunday, Aug. 27. Undergraduate and graduate students are encouraged to apply as volunteers to help with the administration of the conference. In exchange, students will receive complimentary conference registration, housing (for out-of-town volunteers) and some meals. Volunteers will be expected to be available for a total of 4-5 hours of work per day during

the week of the conference, which will take place Nov. 13-19 in New Orleans. Successful applicants will be notified of their acceptance by Sept. 30. If you have any questions please e-mail student-vols@info.supercomputing.org.

- Please remember to send your news concerning grants, awards, conferences, or other pertinent information to PR Manager Kristen Sunde at ksunde@cct.lsu.edu.
- Follow CCT with social media to access photos and see news, events or updated information. These pages are public; you do not need an account to view the information.
 - [Facebook group](#) : LSU Center for Computation & Technology
 - [Twitter](#) : LSUCCT
 - [YouTube channel](#) : LSUCCT

Upcoming Grant Deadlines:

Note: Please check the [CCT deadline Web site](#), since it is updated daily.

[Expeditions in Computing](#)

September 10 2010 10:00 am

At Least \$ 10,000,000.00 available

[CISE Cross-Cutting Programs: FY 2011](#)

December 17 2010 10:00 am

At Most \$ 3,000,000.00 available