



May 10 – 16, 2009

CCT Represented Through ACM International Collegiate Programming Contest

Kathy and Isaac Traxler recently participated in the 33rd World Finals of the ACM International Collegiate Programming Contest, which took place this year at The Royal Institute of Technology (KTH) in Stockholm, Sweden. The Traxlers supervised several activities at the contest.

This year, KTH was able to broadcast the entire contest live on the Web and on a Swedish television channel. This was a major first for the contest, and Slashdot had an article posted about this.

The Traxlers have participated in ICPC annually for the past 10 years, and they have mentored students studying computer science and related fields, encouraging them to participate in such competitions to gain valuable programming experience and have an opportunity to collaborate with their peers from around the world.

In the semester prior to the ICPC World Finals, more than 7,000 teams of 3 students from more than 1,800 universities in 88 countries competed at more than 250 sites to earn an invitation to compete among the 100 best teams in the world.

Participation in the international contest is by invitation only, but for the regional programming contest, LSU, through CCT and the Department of Computer Science, hosts the ACM South Central U.S.A. regional, from which the top team in this region (Texas, Oklahoma and Louisiana) is sent to the ACM World Finals.

The Traxlers coach the computer science students from LSU who participate in the regional. The regional consists of a distributed contest with LSU as the central site with the judges and judging hardware and software, along with four other sites. The regional contest gives CCT and the Department of Computer Science a chance to recruit graduate students from the top programmers in the region. This year, LSU's best team finished 15 out of 68. These students were the highest-ranked Louisiana team participating. LSU has been the state champs in this competition all but one year for the past decade.

The Traxlers work very hard to motivate students each year to try to be the best regional team, practicing one night a week throughout the academic year. The LSU students invest a lot of personal time outside of work and school to reach this goal. This year's team included CCT students Jason Kincl, Chris Micelli and Michael Micelli.

“The competition is an amazing experience for the students, and helps them understand who their peers really are and where they stack up internationally, which is something that rarely happens for most undergraduate students,” Isaac Traxler said.

ICPC Executive Director Bill Poucher of Baylor, the Director of Regional Contests, James Comer of Texas Christian University and the North American Director, Ali Arooj of University of Central Florida, have been very pleased with the quality of LSU’s regional and the contributions LSU has made to ICPC over the past 10 years.

CCT in the News:

- **Head in the Clouds**
LSU Researchers Use High-Performance Computing to Get Clearer Picture of How Atmospheric Particles Affecting Climate Change are Created
Scientists and researchers are using computational science technology to get a deeper understanding of nucleation, the beginning phase of many chemical and physical processes such as condensation, crystallization and precipitation, when nuclei of new particles form from molecular precursors.
<http://www.cct.lsu.edu/site.php?pageID=63&newsID=1002>
- **Cancer Research: LONI User Feature Story**
Assistant Professor Dr. Seetharama D.S. Jois devotes about half his time to educating students in the University of Louisiana at Monroe’s College of Pharmacy; the other half he devotes to researching solutions to some of life’s most vexing problems.
<http://www.cct.lsu.edu/site.php?pageID=63&newsID=1005>

Upcoming Lectures:

- John Quackenbush, from the Dana-Farber Cancer Institute and the Harvard School of Public Health, will be lecturing on “Information-integration approaches to biological discovery in high-dimension data” hosted by the Louisiana Biomedical Research Network. The lecture will take place Thursday, May 28, at 3 p.m. in the Life Sciences Annex Auditorium Room A101.
- Jiangguo Liu, from Colorado State University, will lecture on “The Enriched Galerkin (EG) Method for Local Conservation” as a part of the Computational Mathematics Seminar Series. The lecture will take place on Monday, June 15 at 11 a.m. in Johnston 338.

Please Note:

- ICCS 2009 will take place in downtown Baton Rouge, offering three free tutorials on Sunday, May 24. The tutorials include:

- Parallel Performance Evaluation Tools for HPC Systems
- GPU Processors for Data Parallel Solutions for High-Performance Computation Research
- Developing HPC Applications with the Cactus Framework

Those who wish to take part in the tutorials must register in advance, but do not need to pay a conference fee to attend tutorials. For more information on ICCS 2009 tutorials, or to see a complete schedule of conference events, visit <http://www.iccs-meeting.org/iccs2009/>

- ALL CCT meetings of the Spring 2009 semester will take place Wednesdays at 3 p.m. in Johnston 338. If you have any information, news or announcements you wish to include at the meeting, please notify Karen Jones, kjones@cct.lsu.edu. **The last ALL CCT meeting for this semester is scheduled for May 20.** Please make every effort to attend.
- CCT faculty, staff and students are invited to attend the International Conference on Computational Science Welcome Reception on Monday, May 25 at 6:30 p.m. at the Louisiana Art & Science Museum. The first and second floor galleries will be open for attendees, featuring the special exhibit *Arctic Spirit: Inuit Art* from the Albrecht Collection at the Heard Museum. If you wish to attend, please R.S.V.P. to Jennifer@cct.lsu.edu by Friday, May 15.
- CCT and the AVATAR Initiative will host the John Lennon Educational Tour Bus on the LSU campus Thursday, June 4, and Friday, June 5. The bus is a mobile music and audio recording studio that visits college campuses, schools and community organizations across the United States each year to give students a chance to produce their own songs and music videos, experimenting with audiovisual technology. Apple provides all of the computer and recording equipment available on the bus. The John Lennon Educational Tour Bus will be parked on the south end of the Parade Ground, on the Union side. The bus will be open from 9 a.m. to 5 p.m. on these two days. Students, faculty and community members are invited to come experience the bus and use the equipment inside to produce their own digital media projects. There is no cost for this activity. CCT and AVATAR are planning to have the bus open to the general public on Thursday, June 4, and will arrange for groups to tour the bus and use it for special digital media projects such as music recording, songwriting and music video production on Friday, June 5. If you are interested in having a group of students from your school or department participate in the special project session on Friday, June 5, please contact AVATAR coordinator Lea Anne Couvillion at leaanne@cct.lsu.edu to make these arrangements.
- **Deadlines open for SC09 in Portland, Oregon:**

POSTERS/DOCTORAL SHOWCASE/BOFs/CHALLENGE

Due: Monday, July 27, 2009

Notification: Monday, August 17, 2009

SHOWCASE/BOFs/CHALLENGE

Due: Monday, July 27, 2009

Notification: Monday, August 17, 2009

DISRUPTIVE TECHNOLOGIES

Due: Monday, July 27, 2009

Notification: Monday, August 17, 2009

STUDENT VOLUNTEERS/BROADER ENGAGEMENT

Applications Due: Monday, August 3, 2009

Notification: Monday, September 7, 2009

EDUCATION PROGRAM

Applications for the on-site program due: Monday, June 1, 2009

- Please note the three Cactus tutorials offered in the coming months. No prior knowledge of Cactus is required and material will be available on the Cactus Web site.

1.) May 24 in Baton Rouge, LA:

A half-day tutorial for ICCS <<http://www.iccs-meeting.org/>> (International Conference on Computational Science) titled "Developing HPC Applications with the Cactus Framework". It will introduce the Cactus framework, how to write applications using Cactus, and how to use its adaptive mesh refinement infrastructure.

Note that you can attend this tutorial without registering (and paying) for the conference, but you need to register for the tutorial itself.

2.) May 27 in Baton Rouge, LA:

A two-hour beginner's tutorial as part of the LSU/LONI HPC training courses, to be announced at <<http://www.hpc.lsu.edu/training/>>. It will introduce the Cactus framework and how to use it on the LSU/LONI HPC systems.

3.) June 22 in Arlington, VA:

A half-day tutorial as part of TeraGrid '09 <http://www.teragrid.org/tg09/index.php?option=com_content&task=view&id=55>. This will be a hands-on tutorial introducing Cactus, building applications, running simulations, and visualizing output.

- If you have any news for the CCT Weekly, please e-mail PR Manager Kristen Sunde directly at ksunde@cct.lsu.edu.

Upcoming Grant Deadlines:

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>

- Petascale Computing Resource Allocations (PRAC)
May 20 2009 10:00 am
At Most \$ 500,000.00 available
<http://www.nsf.gov/pubs/2008/nsf08529/nsf08529.htm>

- Faculty Early Career Development (CAREER) Program
July 22 2009 10:00 am
At Most \$ 400,000.00
Full Proposal Deadlines by Discipline: July 21, 2009 - BIO, CISE, EHR July 22, 2009 -
ENG July 23, 2009
<http://www.nsf.gov/pubs/2008/nsf08557/nsf08557.htm>

- Information and Intelligent Systems (IIS): Core Programs
August 30 2009 10:00 am
At Most \$ 3,000,000.00 available
http://www.nsf.gov/pubs/2009/nsf09557/nsf09557.htm?govDel=USNSF_25

- Computing and Communication Foundations (CCF): Core Programs
August 30 2009 10:00 am
At Most \$ 3,000,000.00 available
http://www.nsf.gov/pubs/2009/nsf09555/nsf09555.htm?govDel=USNSF_25

- CISE Cross-Cutting Programs: FY 2010
August 30 2009 10:00 am
At Least \$ 3,000,000.00 available
http://www.nsf.gov/pubs/2009/nsf09558/nsf09558.htm?govDel=USNSF_25