June 7-13, 2009

CCT Hosts Beowulf Boot Camp to Teach Students Supercomputing Basics

Beowulf Boot Camp might sound like a summer reading program featuring the Old English poem, but it actually is a summer education experience that will give Louisiana high-school students a unique opportunity to work hands-on with advanced computing technology that is not usually available in a typical classroom setting.

The CCT will host the Beowulf Boot Camp on campus June 15-19, with 24 students from 10 Louisiana high schools participating. The students will meet from 9 a.m. until 3:30 p.m. in the Fred C. Frey Computing Services Center during the five days of the camp, working directly with LSU researchers to learn the basics of supercomputing and computational science research.

During Beowulf Boot Camp, students will work in small groups to build computer clusters from scratch. They will then connect the clusters from each group together to form a mini supercomputer. The students will develop and run basic applications on the clusters and will learn simple programming exercises. At the end of the camp, the students will run performance benchmark tests to see how the mini supercomputer they build measures up against the largest and fastest supercomputers in the world.

The camp is named after the Beowulf supercomputing cluster, which CCT and LSU Department of Computer Science Professor Thomas Sterling invented. Beowulf is now the building block of many of the world's supercomputers.

Sterling, a former NASA scientist who leads the CCT Systems Science and Engineering research focus area, developed the summer camp in collaboration with CCT faculty and staff. CCT hosted the first Beowulf Boot Camp in August 2007, with students and teachers from five Baton Rouge high schools participating. For the second offering of the camp, CCT has included more students from more high schools.

"It is important that University professors focus not only on college-age students, but reach out to students in the K-12 grades, inspiring them to attend college and making them aware of the possibilities in a field many have not considered or been exposed to previously," Sterling said. "With the Beowulf Boot Camp, the students will not only learn more about computational science, they will learn more about themselves. This camp helps them realize they can interact with professors and university researchers, and

exposes them to new interests and opportunities for their future careers or academic studies."

In future years, CCT hopes to work with other universities through the Louisiana Optical Network Initiative to offer the summer camp outreach to more students throughout the state.

For more information on the camp or to see a complete schedule of activities, please visit http://www.cct.lsu.edu/BeowulfSummerCamp .

Pats on the Back:

- A new science research Web site, http://www.scienceface.org, has begun a series of interviews featuring scientists who study black holes. Current interview subjects include former CCT Director Ed Seidel and Christian D. Ott, an adjunct research associate with the CCT.

CCT in the News:

- **John Lennon digital media bus parks at LSU**
Source: 225 Select
Imagine all the people who will show up Thursday for the John Lennon Educational Tour Bus when it pulls up to LSU's campus.
http://225select.225batonrouge.com/225select/73/events

- **Lennon bus set to stop at LSU**
Source: The Daily Reveille
The John Lennon Educational Tour Bus will be parked along the south end of the Parade Ground near the Union from 9 a.m. to 5 p.m. today, according to a news release from the University Center for Computing & Technology.
http://www.lsureveille.com/lennon-bus-set-to-stop-at-lsu-1.1759672

- **LSU's black holes collide**
Source: The Advocate
It's something that happens all the time, but nobody ever sees: the collision of two black holes in space.
http://www.2theadvocate.com/news/47135102.html?showAll=y&c=y

Upcoming Lectures:

- Ravi Sethi, president of Avaya Labs, will lecture on "Enduring Themes in Voice and Data Communications for Enterprises" as part of the IT Eminent Lecture Series on Tuesday, June 9, at 1:30 p.m. in Coates Hall Room 145.

- 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:

- The next ALL CCT meeting will take place Wednesday, June 17 at 1:30 p.m. in Johnston 338. Vice Chancellor Brooks Keel and Provost Astrid Merget will attend this meeting to address the University's budget situation. Please make every effort to attend.

- Future ALL CCT meetings for summer and the Fall 2009 semester will take place July 15, Aug. 26, Sept. 23, Oct. 21, Nov. 11 and Dec. 16. All meetings are at 3 p.m. in Johnston 338 unless otherwise announced. Please make every effort to attend these important meetings.

- IEEE Cluster 2009 will take place Aug. 31-Sept. 4 in New Orleans. Daniel S. Katz is general chair, and Thomas Sterling is program chair for Cluster 2009. More information about the conference is at http://www.cluster2009.org. Please note the following deadlines for this conference:

  Technical paper notification: June 19
  Poster submissions: June 26
  Poster notification: July 24
  Poster camera-ready deadline: July 31
  Paper camera-ready deadline: July 31

- **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, 200
  STUDENT VOLUNTEERS/BROADER ENGAGEMENT
  Applications Due: Monday, August 3, 2009
  Notificatio: Monday, September 7, 2009

- Cactus will host a half-day tutorial June 22 in Arlington, VA as part of TeraGrid 09. This will be a hands-on tutorial introducing Cactus, building applications, running simulations, and visualizing output. No prior knowledge of Cactus is required and

material will be available on the Cactus Web site.

- 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

- 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