

## June 13-19, 2010

# Forty Students from Around the State Report to LSU for Beowulf Boot Camp 2010

The CCT is hosting the third annual Beowulf Boot Camp June 14-18, drilling Louisiana high school students in supercomputing basics, and giving them a chance to work handson with university researchers.

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, wanted to develop an outreach activity that would give high school students in the state a chance to experience computational science research.

He created the first Beowulf Boot Camp in August 2007, with assistance from CCT faculty and staff. In 2007, students and teachers from five Baton Rouge high schools participated, and for the second offering of the camp in 2009, 24 students and one teacher from 15 Louisiana high schools attended.

Since beginning this activity, Sterling hoped to expand the camp to more students statewide and this year, 40 students from 19 Louisiana high schools in all parts of the state are attending. CCT offers this camp at no-cost to participating students, who enrolled on a first-come, first-served basis in January 2010. Hewlett-Packard provided CCT with equipment for the camp at a discounted rate, and donated printed materials for the students.

The students will meet from 9 a.m. until 3:30 p.m. in the School of the Energy, Coast and Environment Building each day this week, working directly with Sterling and faculty from his research group.

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

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

#### **CCT Welcomes:**

### Pats on the Back:

• Congratulations to the students who participated in LSU Get Animated! Summer Camp last week at the Shaw Center for the Arts. The students spent a week learning basic animation concepts and created original films, which will be posted to the CCT YouTube channel and screened at the Red Stick International Animation Festival, Nov. 10-13, 2010.

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

- On Wednesday, June 16, the Discovery Channel is featuring an episode of "Morgan Freeman's Through the Wormhole" on "The Riddle of Black Holes," featuring an interview with Christian D. Ott of Caltech, who also is an adjunct assistant professor at the CCT and a frequent collaborator on CCT projects. The episode will air at 10 p.m. Details are available at <a href="http://science.discovery.com/tv/through-the-wormhole/photos/black-holes/index-06.html">http://science.discovery.com/tv/through-the-wormhole/photos/black-holes/index-06.html</a>.
- Louisiana Students Report to LSU's Beowulf Boot Camp Source: Inside HPC
- Forty Students from Around the State Report to LSU for Beowulf Boot Camp Source: <u>HPC Wire</u>

### **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 (<a href="mailto:susie@cct.lsu.edu">susie@cct.lsu.edu</a>) 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.
- Please note that the University has frozen all LaCarte spending, unless cardholders
  receive written approval for a purchase from Accounts Payable or Purchasing. If you
  have a purchase you wish to make that you feel may warrant an exemption to the
  spending freeze, please contact Theresa Markey or Andrew Cox in the CCT Business
  Office for guidance
- LAST CALL FOR REGISTRATION: The Virtual School of Computer Science and Engineering is now accepting registrations from graduate students, postdoctoral researchers, and professionals from academia, government and industry for a course on Petascale Programming Environments and Tools, which will take place July 6-9. In this course, participants will learn how to scale up computational science applications and cyberinfrastructure for petascale-class machines. This course is

offered as a distributed program among 10 sites, including CCT. To register or learn more, visit <a href="http://www.vscse.org/summerschool/2010">http://www.vscse.org/summerschool/2010</a>.

## • Supercomputing Conference 2010 Information and Deadlines:

- o Follow SC10 with social media to get the latest news, information, and deadlines -- Twitter @ SuperComputing; Facebook group: SC10.
- O SC10 is now accepting nominations for the 2010 Seymour Cray Computer Engineering Award, the Sidney Fernbach Memorial Award, and the Ken Kennedy Award. These awards will be presented during the conference, Nov. 13-19 in New Orleans. Nominations are due Thursday, July 1, 2010. Links to nomination forms and more information about these awards is available at <a href="http://sc10.supercomputing.org/?pg=awards.html">http://sc10.supercomputing.org/?pg=awards.html</a>.
- o SC10 is seeking submissions for posters and ACM student posters that display cutting-edge, interesting research in high-end computing, storage, networking and analytics. Posters provide an excellent opportunity for short presentations and informal discussions with conference attendees. Posters will be prominently displayed for the duration of the conference, giving presenters a chance to showcase their latest results and innovations. One poster will be honored with a Best Poster Award. A limited number of active displays will be part of the poster session. Students who are ACM members also are encouraged to submit posters as part of the ACM Student Research Competition (SRC), with awards and special recognition at SC10 plus the chance to compete in the SRC grand finals. Submissions are due July 15, 2010. For questions, contact: <a href="mailto:posters@info.supercomputing.org">posters@info.supercomputing.org</a>, or visit the submission site, <a href="http://submissions.supercomputing.org">http://submissions.supercomputing.org</a>, or visit
- A Symposium on High Performance Computing Workforce Development will take place during SC10, Nov. 16-18, 2010. This symposium will address the skills, training and expertise needed to develop a strong, effective high-performance computing-based workforce. The symposium now is accepting paper submissions and proposals for panels that address high-performance computing and cyberinfrastructure workforce development. Suggested topics include current problems, proposed or demonstrated solutions, and future considerations. Papers should not be longer than 10 pages, and panel suggestions should include a 150-word maximum abstract. Paper and panel submissions are due July 15, 2010 at the SC10 submission site, <a href="http://submissions.supercomputing.org">http://submissions.supercomputing.org</a>. The program committee will review each submission, and notify participants of acceptance by Aug. 15, 2010.
- The SC10 Doctoral Research Showcase invites Ph.D. students in high-performance computing, networking, storage, analytics, and visualization who anticipate graduating within a year to submit a short summary of their research for consideration toward the conference program. Those selected will

have an opportunity to present a 15-minute summary of their research to experts from academia, industry and research laboratories. Students should submit a single page summary of their doctoral research, along with a publications list and three slides on their key findings and results for consideration by Monday, July 26. For more information, please contact <a href="mailto:doc-showcase@info.supercomputing.org">doc-showcase@info.supercomputing.org</a>, or visit the Web site, <a href="http://sc10.supercomputing.org/?pg=doctsc.html">http://sc10.supercomputing.org/?pg=doctsc.html</a>.

- The SC10 Education Program is now accepting applications for travel support to attend the conference, which will take place Nov. 13-19 in New Orleans, Louisiana. The program is open to undergraduate faculty, undergraduate and graduate students, and high school teachers interested in learning how to use supercomputing and computational science in their classrooms. Participants are encouraged to stay through the entire conference, where they will be engaged in hands-on activities to encourage them to apply computational science, grid computing and high-performance computing resources in education. The deadline to apply for the SC10 Education Program event is July 31. For more information, please visit <a href="http://sc10.supercomputing.org/?pg=edprog.html">http://sc10.supercomputing.org/?pg=edprog.html</a> or e-mail <a href="education@info.supercomputing.org">education@info.supercomputing.org</a>
- O The SC 10 Education Program introduces undergraduate faculty and precollege educators to HPC and computational tools, resources and methods. During a four-day, intensive workshop at the conference, educators learn ways to integrate HPC and computational techniques into their classrooms and research programs. Special events scheduled for SC10 include a teacher's day and support for high school field trips. Limited travel support is available; those who do not receive travel support may participate by paying a separate registration fee. Travel support applications are due July 31; details are available at: <a href="http://sc10.supercomputing.org/?pg=edprog.html">http://sc10.supercomputing.org/?pg=edprog.html</a>. For more information, email: <a href="education@info.supercomputing.org">education@info.supercomputing.org</a>.
- 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

- o Applications for Student Volunteers for SC10 are now being accepted. The deadline to apply is Sunday, Aug. 27. The conference already has half of its needed volunteers, so interested students are encouraged to sign up now to be part of this program. 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.

o Facebook group: LSU Center for Computation & Technology

o Twitter: LSUCCT

o YouTube channel: LSUCCT

## **Upcoming Grant Deadlines:**

**Note:** Please check the <u>CCT deadline Web site</u>, since it is updated daily.

Expeditions in Computing
September 10 2010 10:00 am
At Least \$ 10,000,000.00 available