



**Oct. 31-Nov. 6, 2010**

### **LSU Students Prepare for Supercomputing Competition**

BATON ROUGE—Whether it's building a small cluster or solving hardware issues, six LSU students have learned more than they could have imagined about supercomputing in the last few months. The LSU team, consisting of Austin Howick, Kenny Barron, McKendon LaFleur, Tung Le, Alex Chretien and Jason Kincl, has been preparing to compete in the Student Cluster Competition at Supercomputing 2010 (SC10) in New Orleans, November 15<sup>th</sup> – 17<sup>th</sup>. The team of five LSU computer science students and one LSU computer engineering student was selected based on an application process. Each member has volunteered almost three hours every Tuesday night since June in addition to subgroup meetings and individual time to learn applications, all while keeping up with course work, as well as other extracurricular activities. They all have applications and libraries they must install and configure to perform optimally so that their benchmarks are better than any other team's.

The team's coach, Isaac Traxler, Unix Services Manager for LSU's High Performance Computing, was more than happy to volunteer his time to train the students. The SC10 selection committee chose the LSU team, along with seven others, from a large number of qualified teams who applied. The winning team will be recognized at the SC10 Awards Ceremony luncheon on Thursday, November 18<sup>th</sup>. The team at LSU hit the ground running in June as they began designing and building a cutting-edge commercially available small cluster, constrained by two 13 amp circuits at 120 volts. LSU was fortunate to have Hewlett-Packard, Mellanox, LATG and the Portland Compiler Group sponsor them and supply the necessary materials.

“The preparation time each team member has put in is incredible. It is a great opportunity for them to apply what they are learning in the classroom and learn from the different obstacles and challenges that have occurred,” said their mentor.

Jason Kincl, CSC Undergrad said, “It is one thing to learn about scientific computing in a classroom. We have found that it is an entirely different story when we are spec'ing, building, and running a cluster along with learning the simulation software we will run on it. We have all experienced a slice of what it takes to run a HPC cluster and we have all learned a lot.”

During SC10, teams consisting of six students will utilize the amazing power of clusters and the ability to work with open source software to solve interesting and important problems. The competition, which occurs on the exhibit floor, engages students in real-time to run a workload of real-world applications on the clusters they designed, while never exceeding the allowed power limit.

The teams will put together and test their machines to run the High Performance Computing & Communications Council benchmarks on Monday night, until they receive the competition data sets for the competition. Each team will work from Monday night until the close of the exhibit floor on Wednesday evening. Conference attendees will be able to observe each team as they deal with the workload at hand. Not only will students race to complete the greatest number of application runs, but also must impress the judges with their application knowledge.

Throughout the showcase, teams will have the opportunity to show off their skills and knowledge of the equipment. Each team will be scored on the amount of workload completed, benchmark performance and interviews and outreach. The team with the highest combined score will be named the winner. Judges will also recognize the team with the highest LINPACK, as well as SC Fan Favorite.

“Each one of these guys should be extremely proud of themselves for what they have accomplished already, “ said their mentor. “It has been great to see them learn so much about aspects of supercomputing they were very unfamiliar with. Now, they talk about these things as if they are long lost friends.”

The student team will continue meeting each Tuesday to practice application runs until the competition in November. Regardless of whether they win or lose, all agree the training sessions are providing them with a valuable opportunity to practice working with open source software.

McKendon LaFleur, CSC undergrad said, “Time management is probably the most important thing I have learned out of the whole experience. I think we have all learned more about ourselves as we have faced different challenges.”

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

##### **LSU Researchers Awarded One of the Largest NSF Grants in Louisiana History**

Source: [LSU Media Center](#)

##### **HPC Movers and Shakers: Thomas Sterling**

Source: [HPCwire](#)

##### **Fans, Fanfare to Welcome New Play N Trade Store**

Source: [PRLog](#)

## **Festival Narrows Focus to Film**

**Source:** [The Advocate](#)

### **Please Note:**

- SCALA 2011 will be held at Tulane University, January 28-29. Additional details will be provided soon.
- The Red Stick International Animation Festival has partnered with the Baton Rouge Symphony Orchestra (BRSO) to host a performance of the popular, interactive touring concert Video Games Live on Saturday, Nov. 13, at 7 p.m. in the Baton Rouge River Center Arena. This will be the closing event of the sixth annual festival, which will take place Nov. 10-13, 2010. Video Games Live are on sale through the River Center's [Ticketmaster page](#). There will be a pre-show meet-and-greet event at 5:30 p.m. prior to the performance for all ticket holders. Ticket prices range from \$23 to \$73 per person, depending on seating.
- The Red Stick International Animation Festival has tickets for Princess Ball, an annual highlight of the festival, on sale now! The Princess Ball will take place Sunday, Nov. 7 (the Sunday preceding the festival) from 3-5 p.m. at the Old State Capitol in downtown Baton Rouge. Princess Ball tickets are \$20 per person, and are available for online purchase at <https://www.ticketturtle.com/index.php?ticketing=rsiaf>. Tickets are non-refundable, and will be available for sale until the event reaches capacity at the Old State Capitol.
- Sign up for the [groupon.com](#) mailing list to receive their deal of the day for Baton Rouge. Red Stick International Animation Festival tickets offered at 50% off!
- The 2011 application for National Science Foundation East Asia and Pacific Summer Institutes for U.S. Graduate Students is now available: [www.nsf.org](http://www.nsf.org). This is a flagship international fellowship program for developing the next generation of globally engaged U.S. scientists and engineers knowledgeable about the Asian and Pacific regions. Fellows are supported to participate in eight-week research experiences at host laboratories in Australia, China, Japan (10 weeks), Korea, New Zealand, Singapore and Taiwan from June to August. The program provides a \$5,000 summer stipend, round-trip airfare to the host location, living expenses abroad, and an introduction to the society, culture, language, and research environment of the host location. The deadline for the application is November 10, 2010. The program is intended for U.S. graduate students pursuing studies in fields supported by the National Science Foundation. Women, minorities, and people with disabilities are strongly encouraged to apply. Applicants must be enrolled in a research-oriented master's or Ph.D. program and be U.S. citizens or U.S. permanent residents by the application deadline date. Should you have any questions, please contact the EAPSI Help Desk by email at [eapsi@nsf.org](mailto:eapsi@nsf.org) or by phone at 1-866-501-2922.

- 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 from 9 a.m. until 1 p.m., concurrent with LSU Homecoming. At LSU Day, CCT will host a "Visualize This!" exhibit showcasing student research projects and visualization work in the LSU Union computer laboratory. Additionally, the Red Stick International Animation Festival will provide a Best of the Fest reel to screen for audiences in the Union Theatre, and Professor Rudy Hirschheim will perform with Capital Gains, a band comprised of faculty from the E.J. Ourso College of Business. If you would like to participate or have your students participate in the "Visualize This!" exhibit, please contact Sheri Thompson at [sthomp8@lsu.edu](mailto:sthomp8@lsu.edu).
- 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](mailto: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 now has an iPhone app that provides news, video, campus maps, athletics updates, and more. This app is a free download from the App Store or at <http://lsumobileapps.lsu.edu>. The technology coordinators who created this app are adding features, and the app should be available to Blackberry mobile users soon. Please send suggestions for content you would like to see through the LSU app to [lsumobile@lsu.edu](mailto:lsumobile@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.
  - Check out the 8<sup>th</sup> issue of the SC10 Newsletter: <http://sc10.supercomputing.org/files/SC10NewsletterIssue8.html>
  - For CCT staff and faculty planning to attend SC10 in New Orleans, the CCT booth will need volunteers to meet and greet visitors. Shifts will be two hours long. The exhibition days when volunteers are needed are Tuesday, Nov. 16, Wednesday, Nov.17 and Thursday, Nov. 18. Please let CCT Events Coordinator Jennifer Claudet ([Jennifer@cct.lsu.edu](mailto:Jennifer@cct.lsu.edu)) know if you are interested in signing up and she will let you know the available times.
  - According to LSU PM13, individuals driving their personal vehicles to New Orleans for SC10 will only be reimbursed a total of 99 miles round trip for mileage.

- SC10 Lodging information: <http://sc10.supercomputing.org/?pg=hotels.html>. For those staying in New Orleans for SC10, you will need to fill out the Governmental Employees Hotel Lodging Sales/Use Tax Exemption Certificate (R-1376), which can be found on the Accounts Payable & Travel website: <http://www.fas.lsu.edu/AcctServices/acctpay/forms.html>
- SC conference attendees are welcome to attend Broader Engagement and Education Program sessions and presentations, including attendees who only have exhibit badges. SC10 also is introducing new registration categories for conference attendees who would wish to participate in associated meals, catered events, or receive program logo merchandise. For more information or to sign up for these programs, please visit:

Registration: <http://sc10.supercomputing.org/?pg=registration.html>

Broader Engagement: <http://sc10.supercomputing.org/?pg=broadeng.html>

Education: <http://sc10.supercomputing.org/?pg=edprog.html>

- Please remember to send your news concerning grants, awards, conferences, or other pertinent information to PR intern Samantha Navarra at [snavarra@cct.lsu.edu](mailto:snavarra@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.

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

December 17 2010 10:00 am

At Most \$ 3,000,000.00 available

#### [Cyberlearning: Transforming Education](#)

January 17 2011 10:00 am

At Most \$ 2,500,000.00 available

#### [Cyber-Enabled Discovery and Innovation \(CDI\)](#)

January 19 2011 10:00 am

A Portion Of \$ 36,000,000.00 available

\*A message from James L. Bates, Executive Director, Office of Sponsored Programs:

“Due to upcoming major deadlines, the Office of Sponsored Programs (OSP) is expecting a very large volume of proposals during the months of October, November and December. Please encourage your faculty and staff to route proposals early so we can meet all deadlines and avoid bottlenecks. Internal deadlines have been established for the Board of Regents proposals:

[http://appl003.lsu.edu/osp/osp.nsf/\\$Content/Board+of+Regents+Deadlines](http://appl003.lsu.edu/osp/osp.nsf/$Content/Board+of+Regents+Deadlines).

For all other proposals during this period, we ask PIs to provide us with additional lead time beyond our normal 3 business day deadline to review and process proposals. Thank you for your cooperation.”