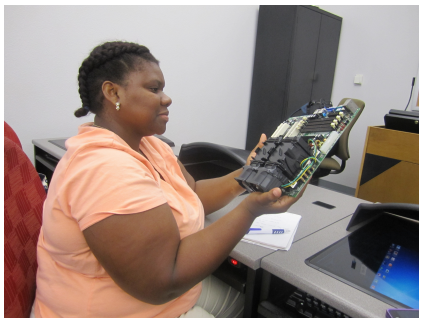
CCT WEEKLY

March 3 – March 9, 2013

LSU CCT Reaches Out to BRCC for HPC Training

LSU's Center for Computation & Technology (CCT) has made a lasting connection with the science faculty at the Baton Rouge Community College (BRCC) as part of CCT's and the Louisiana Alliance for Simulation-Guided Materials Applications's (LA-SIGMA's) outreach programs. LSU Associate Professor Juana Moreno of the Department of Physics & Astronomy and CCT, CCT IT Analyst Kathy Traxler, and CCT LA-SiGMA Coordinator Leigh Townsend, visited BRCC faculty, and, as a result of these meetings, were invited to lecture on programming, problem solving, High Performance Computing (HPC), computer and network security, and computational research.

BRCC students and teachers in the courses Introduction to Programming and Operating Systems hosted LSU staff for three consecutive weeks.



Isaac Traxler, LSU's HPC systems administrator, presented information on the differences in operating systems. In addition, he disassembled a desktop computer and discussed in detail the various parts and their purposes. This activity was very popular with the students, as most were seeing the inside of a computer for the first time.

CCT's Assistant Director of HPC Enablement Jim Lupo explained what HPC is and provided visual examples of different types of HPC research. Many of his examples caught the students' interest. One in particular was a movie of an incident that caused the death of several firefighters. In this demonstration, weather conditions caused a small fire to be caught between two winds, which then produced an instantaneous fire rush to the walls and roof of a house creating a deadly blaze.

LSU's Information and Network Security Analyst Quang Le gave an excellent presentation on job readiness discussing his background, his experience, how he got the job, what the job is, and what the students should start doing outside of class as preparation to qualify for a similar job. In addition, Kathy Traxler gave a problem solving

demonstration to the BRCC students. Many tips and tricks were discussed during the demonstration, although most students did not realize they were "problem solving."

An important goal of these outreach events is to recruit students who are interested in and excited about working with LSU faculty in the science, math, engineering, and computer science fields. LSU CCT also offers two Research Experiences for Undergraduates (REU) programs during the summer, one in computational sciences, and one in materials sciences (LA-SiGMA), which benefit students wishing to further their research experiences.

Several CCT faculty and research staff will be attending BRCC's Career Fair to recruit graduating students to LSU STEM majors and to CCT for research. They will take the LittleFe Cluster in a box and discuss several researchers' projects that will be of interest to the students.

For more information on the LSU Center for Computation & Technology and/or these programs, visit: http://www.cct.lsu.edu/.

Lectures this Week:
TUESDAY –
There will be a lecture on "Modeling Rare Events" by Weinan E, Princeton University. The lecture will take place Tuesday, March 5th at 3:30 PM in 338 Johnston Hall.

Please Note:

- Mark your calendars! The CCT Crawfish Boil will be Thursday, April 11th from 4:30-6:30 in the front courtyard of Johnston Hall. More details coming soon.

- Registration is open for Finite Element Circus & Rodeo, March 8-9, 2013, at Louisiana State University. For more information and to register, visit http://www.cct.lsu.edu/events/finite-element-circus-rodeo.

- 2013 Clifford Lectures at Tulane University, March 13-16, 2013: http://129.81.170.14/~kurganov/CliffordLectures2013/index.html

- The Beowulf Bootcamp is open for registration. CCT will host the sixth Beowulf Boot Camp July 8-12 on the LSU campus. This exciting course offers students and teachers a unique opportunity to work with advanced research technology not usually available

in a typical classroom setting. During Beowulf Boot Camp 2013, students will work hands-on with a number of LSU professors as they learn how to build and use supercomputers.

- **WHO:** Louisiana High School Students, Baton Rouge Community College Students, and Louisiana Teachers
- Students will engage in the following activities:
  - building a computer cluster from scratch
  - installing the Linux operating system on the computer they've built
  - connecting computers put together by their peers to make a mini-supercomputer
  - learning how to program a mini-supercomputer in parallel with Python
  - interactive activities to help understand how Parallel computing works in Supercomputing
  - running performance benchmarks to determine how your cluster ranks in comparison with the fastest and largest supercomputers in the world
- This camp is introductory so students do not need a strong computational science background to participate. Some knowledge of programming a plus.
- For more information and to register, visit http://www.cct.lsu.edu/beowulfcamp2013

- 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. Dine-in restaurant meals are not allowed on LaCarte credit cards. Please contact Susie McGlone (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 two weeks, so please plan accordingly.

- Please remember to send your news concerning grants, awards, conferences, or other pertinent information to CCT Event Coordinator Jennifer Fontenot at jennifer@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

Interest groups:

- **MAG (Mobile App-Art-Action Group)**: Everyone interested in the potential for Mobile Apps is invited to come and add their vision for these revolutionary devices.
  - Spring 2013 semester MAG meeting schedule; 4:30- 6:00 pm, 338 Johnston Hall:
    - March 21

        - April 18
    - For more information visit: http://www.cct.lsu.edu/MAG
    - Contact: Jesse Allison (jtallison@lsu.edu)

- **GPU**: meets weekly (Thursdays @ 12:30 pm in 338 Johnston) and encourages participation from anyone who would like to join in the discussions. Join the mailing list: lasigma-gpu@loni.org
    - Contact: Zhifeng Yun (zyun@cct.lsu.edu)

Upcoming events:
March 6: HPC Training: Introduction to Perl
March 8-9: Finite Element Circus & Rodeo
March 13: HPC Training: Introduction to Python Programming
March 20: HPC Training: Make and Software Installation
March 27: Overview of Numerical Libraries
April 3: Introduction to GNU Octave
April 11: CCT Crawfish Boil
April 17: HPC Training: Introduction to GnuPlot