



February 13 – February 19, 2011

LSU CCT to display research, student and partnership activities at inaugural campus-wide TechPAWLooza

The LSU Center for Computation & Technology (CCT) will present research, student, and partnership activities enabled through innovative computational science, advanced cyberinfrastructure, high-performance computing systems, high-speed networking, and economic development initiatives, as part of the first-ever LSU TechPAWLooza, March 3 (Noon-5:00 p.m.), LSU Student Union Royal Cotillion Ballroom.

LSU CCT is an innovative research environment, advancing computational sciences, technologies and the disciplines they touch. Uniting researchers from diverse disciplines helps disseminate ideas and expertise across LSU departments, thereby fostering knowledge and invention. The CCT encourages the University community's involvement in the exciting and groundbreaking activities currently underway. Activities to be showcased at TechPAWLooza are as follows:

The Off-the-Shelf Virtual Reality station combines a Panasonic 3D television with a Microsoft Kinect body motion sensor, giving an interactive experience greater than the sum of its parts. A 3D display does provide the illusion of depth, but the addition of motion tracking lends a much more powerful sense of presence: a virtual reality, like looking through a window, or into a fish tank. Interaction in this space is a natural extension of the user's own hands and arms. In this context Robert Kooima and Jinghua Ge and their team demonstrate a number of interactive tools, toys, and visualizations developed at CCT.

With the **Kinect Synthesizer**, Stephen D. Beck uses data from a Microsoft Kinect body motion sensor to control sound synthesis. Several configurations allow you to play a virtual Aeolian harp, a polyphonic virtual Theremin, or any other kind of sound engine. The purpose of this project is to explore new modes of physical interaction and music making, with the ultimate goal of developing performance interfaces that facilitate and support musical understanding and competencies in uninitiated users.

Tile Display, Tangible Visualization. Brygg Ullmer's team concentrates on tangible visualization--making data presentation meaningful, intuitive, and memorable. The tile display is an example of hardware they have developed to support this vision: the large 10 megapixel surface, spread across four screens, offers a resolution unmatched by

standard screens and projectors, ensuring visibility and clarity. Interaction is done through a ‘casier,’ a category of novel input devices embedded in various physical objects, thus allowing seamless participation by any number of participants. The result is a setup with flexibility that allows cooperation between students, teachers, and researchers in a variety of configurations.

Undergraduate Minor in Digital Media. LSU’s Arts, Visualization, Advanced Technologies, and Research (AVATAR) Initiative in Digital Media offers an interdisciplinary academic program to help students learn skills in the broad, exciting, and emerging field of digital media. The minor will prepare students for careers such as digital artist/animator, character rigging artist, digital technology manager, game developers/designers, digital sound engineering, computer programming, network development and web applications. For more information, visit www.avatar.lsu.edu.

The **CCT HPC** (high performance computing) staff will display a multiple computer cluster illustrating hardware-supported parallel computations. Stop by and see how HPC can assist your research efforts. Students interested in getting involved in representing LSU in local, national and international programming contests should also visit.

Economic Development Initiatives of the LSU CCT: CCT’s Economic Development department actively looks for ways to create new industry partnerships and opportunities to pair University resources with companies like Electronic Arts, Inc. that could benefit from relationships with higher education.

“The greatest challenge any city, state, or region has in attracting new jobs is having sufficient numbers of qualified employees,” said Stacey Simmons, associate director for CCT’s economic development department. “As LSU leads the development of creating training in the digital industries across the state, we have to also provide practical ways to teach teamwork, collaboration, creativity, constraint, as well as the core principles of the digital industries.”

EA Baton Rouge will be in attendance with games and prizes. While you’re there, be sure to check out their demonstrations on finding bugs within game software and how to “crash” a video game. They’ll also be showing their “Inside the EA North American Test Center” video to give prospective game testers an idea of what makes testing games the most fun job on the planet.

Red Stick International Animation Festival will be showcasing screenings from their 2010 “Best of the Fest” competition. The festival accepts entries from students, amateurs, and professionals in the following categories: animated short film; music video; scientific visualization; animation for commercials; animation for games; animation for young audiences, and experimental animation/visual music. More information on the festival can be viewed at: redstickfestival.org.

The Stop Motion Animation Course was developed as a two-part class in order to help students spend time on the full pipeline of the animated film process. Students spent a

semester in visual development for the course, working on the look of the film as well as the characters and sets. The second semester of the course was all about production. Students were each responsible for a scene and making sure the scene conveyed action, emotion, and the point of the story. In the end, the students took over 10,000 shots to animate a short film based on the Norse Myth of the Fenris Wolf. Their film “Fenris & Tyr” will be shown at TechPAWLooza. The students put in a great deal of work and rose to the challenge of realizing this ambitious project. As a result several of them are pursuing internships and jobs in animation studios.

TechPAWLooza is a day devoted to informing and engaging LSU students, faculty, and staff in the abundance of technology available at Louisiana State University, for teaching and learning, for technology support, and for redefining and engaging the education community.

“We are glad to have this opportunity to share with the University community the innovative creations our researchers and collaborators are developing. The CCT has grown vigorously over the last few year’s, and as we continue to grow, I’d like to see more and more faculty, staff and researchers on this campus involved in computational research. I look forward to seeing everyone at TechPAWLooza,” said CCT Director Joel E. Tohline.

For a complete listing of TechPAWLooza activities, visit <https://sites.google.com/site/lsutechpawlooza/home>.

CCT in the News:

Company News

Source: [The Advocate](#)

Letter: BR branding initiative applauded

Source: [The Advocate](#)

In Global Supercomputing Race, China Moves to Front of the Pack

Source: [National Defense Magazine](#)

ISC’11 Keynotes to Explore the Leading Edge of HPC

Source: [insideHPC](#)

Please Note:

- The University will be closed Tuesday, March 8, 2011 for Mardi Gras holiday.
- Effective February 1, 2011, Mailing Services will **require** the use of Charge Slips with outgoing mail that we apply postage to. Charge slips include a bar code that allows Mailing Services to bill departmental budget codes in one easy step. This

process will increase the efficiency and effectiveness of current and future mail operations. Please download the domestic and international forms at <http://pas.lsu.edu/mailling-services/forms>, and follow the instructions at the bottom of the forms. For any questions about this process, please contact Paul Ramirez (pramire@lsu.edu, 578-6086).

- This summer, CCT will host its second Research Experience for Undergraduates (REU), a nine-week program that gives students an opportunity to join interdisciplinary research groups and use the advanced cyberinfrastructure available on campus to work collaboratively on computational science projects. Each participating student will receive a stipend of \$4,500, free housing in University dormitories, and up to \$500 in travel expenses. Interested undergraduate students from any academic discipline are welcome to apply. Applications are due February 28, 2011, and students will be notified of whether they have been accepted by March 31. For more information or to see details on how to apply, please visit <http://reu.cct.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) 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 remember to send your news concerning grants, awards, conferences, or other pertinent information to CCT Event Coordinator Jennifer Claudet 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

Upcoming Grant Deadlines:

Note: Please check the [CCT deadline Web site](#), since it is updated daily.

[Research Experiences for Teachers \(RET\) in Engineering and Computer Science](#)

Supplements and Sites

February 28 2011 10:00 am

At Most \$ 500,000.00 available

High Performance Computing System Acquisition: Enhancing the Petascale Computing Environment for Science and Engineering

March 07 2011 10:00 am

At Most \$ 30,000,000.00 available

Cyberinfrastructure Training, Education, Advancement, and Mentoring for Our 21st Century Workforce (CI-TEAM)

March 16 2011 10:00 am

At Most \$ 1,000,000.00 available

Cyber-Physical Systems (CPS)

March 21 2011 10:00 am

At Most \$ 5,000,000.00 available

*****NSF has revised proposal submission requirements** - a quick review of the changes are noted in this announcement:

http://www.nsf.gov/pubs/policydocs/pappguide/nsf11001/gpg_sigchanges.jsp

Check the NSF website for announcements - www.nsf.gov