

## June 14-20, 2009

# Professor Takes Video Game Design Class to the Next Level

Imagine a college course where your assignments are to play, develop and test original video games.

This is an opportunity LSU has offered since the Fall 2007 semester, in collaboration with University of Illinois at Chicago, or UIC. In the class, which students attend via high-definition video streaming broadcast from Chicago to Baton Rouge, participants learn core concepts to develop and design video games, from storyline to character development to coding.

Working together in groups of three to four, the students form competing video game companies. As a final project, each group develops an original game, and for the final class, the students have a video game marathon in which a panel of faculty, former game class winners and video game industry professionals from both Baton Rouge and Chicago judge their work on several characteristics.

In previous semesters, there were many more UIC than LSU students, and Jason Leigh, a computer science professor at UIC and director of the university's Electronic Visualization Laboratory, taught the course with support from LSU faculty.

This year, the course achieved a more even balance between the two universities. Robert Kooima, Ph.D., who previously worked with Leigh at the Electronic Visualization Laboratory, came to LSU in the Fall 2008 semester to do research as part of the Arts, Visualization, Advanced Technologies and Research, or AVATAR, Initiative in digital media.

Kooima agreed to be the LSU instructor for the course, and worked directly with Leigh to make the teaching more interactive between the two locations than it had been previously.

This year, the course had such even enrollment that out of the eight groups that formed in the class, seven were equally split with team members from LSU and UIC. The video game design teams are interdisciplinary to emphasize links between art and technology. Art students work on animation and character design while computer science students work on the video game programming and code-writing components.

"The structure we were able to do this semester, with the teams equally comprised of LSU and UIC students, really emphasized the collaborative skills that are an integral part of this field," Kooima said. "To complete their final video game projects, the students had to rely on video conferencing technology more heavily than previous classes, and they had to really assess each other's strengths and weaknesses to work effectively as a team between two campuses."

Another new feature of the Spring 2009 semester video game design course was an emphasis on creating games with multi-player, multi-touch capabilities.

"Given the emergence of the iPhone as a gaming platform, multi-touch game design is a driving issue in the game industry, and it is something students must be able to produce if they aspire to work in video game development," Kooima said.

To give the class a place to experiment with multi-touch gaming, Kooima built a 52-inch TacTile LCD touch table that students can use to play and display their video games.

Kooima will display the table and some of the top video games students produced this semester during SIGGRAPH: International Conference on Computer Graphics and Interactive Technologies, the premier conference to showcase new developments in digital media. SIGGRAPH will take place in New Orleans Aug. 3-7.

As in previous semesters, students spent the final class period of the semester playing and presenting the video games they created. Kooima, Leigh and the judging panel evaluated the games on criteria such as interface design, graphics design and programming, and the games constituted a large component of each student's final grade.

For more information on the teams from the Spring 2009 video game course, or to see pictures from the team's Web sites, please visit <a href="http://www.evl.uic.edu/spiff/class/cs426/schedSpr2009.html">http://www.evl.uic.edu/spiff/class/cs426/schedSpr2009.html</a>.

In future offerings of the course, which is scheduled at LSU both as a computer science course (CSC 4700) and an arts course (FMA 4001), students will continue developing multi-touch games that use new platforms such as the LCD table.

#### Pats on the Back:

• Professor Thomas Sterling received a supplement of \$23,000 to his project, "Participation in DARPA/AFRL Exascale Study." This project is funded through Georgia Tech University from the Department of Air Force Research Laboratory.

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

• LSU Hosts Beowulf Boot Camp

Source: HPC Wire

BATON ROUGE, La., June 9 -- 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.

http://www.hpcwire.com/topic/systems/LSU-Hosts-Beowulf-Boot-Camp-47424522.html

• See also: Inside HPC

http://insidehpc.com/2009/06/10/lsu-hosts-beowulf-boot-camp/

• High schoolers getting taste of supercomputer

Source: The Advocate

Luke O'Quinn sat transfixed in front of his glowing computer screen Monday afternoon, typing in short lines of code and listening to the instructor's directions. http://www.2theadvocate.com/news/education/48123337.html

#### **CCT Welcomes:**

• Ahmet Topcu, an IT Consultant for Petashare, who will be joining CCT to work with Professor Tevfik Kosar on a grant-funded TeraGrid project.

### Please Note:

- The next ALL CCT meeting will take place this 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. If you have news or information you would like presented at this meeting, please e-mail Karen Jones at kjones@cct.lsu.edu.
- 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. If you have news or information you would like presented at these meetings, please e-mail Karen Jones at kjones@cct.lsu.edu.
- 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.
- SIGGRAPH 2009 will take place in New Orleans Aug. 3-7. CCT will represent the University with a booth at this conference to highlight ongoing research in digital media. Early registration deadline to attend SIGGRAPH is June 26. For more information on the conference, visit <a href="http://www.siggraph.org/s2009">http://www.siggraph.org/s2009</a>.
- 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 <a href="http://www.cluster2009.org">http://www.cluster2009.org</a>. Please note the

# following deadlines for this conference:

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

• Deadlines open for SC09, Nov. 14-20 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 Notification: Monday, September 7, 2009

- Registration is now open for the Supercomputing 2009 Education Program at the conference in Portland, which will take place Nov. 14-17. The Education Program helps educators and students learn more about computational science topics and gives educators ideas to bring these topics into their classrooms. The program is open to undergraduate faculty, undergraduate and graduate students, and high school teachers. To register or for more information, please visit <a href="http://computationalscience.org/sc09">http://computationalscience.org/sc09</a>.
- 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
<a href="http://www.nsf.gov/pubs/2009/nsf09555/nsf09555.htm?govDel=USNSF">http://www.nsf.gov/pubs/2009/nsf09555/nsf09555.htm?govDel=USNSF</a> 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