

Jan. 25 – 31, 2009

## LSU Professor Receives National Science Foundation's Prestigious CAREER Award

BATON ROUGE – Tevfik Kosar, a professor in the LSU Department of Computer Science, has received the National Science Foundation's CAREER Award.

The NSF CAREER Award is the foundation's most prestigious award for junior faculty members. It is part of NSF's Faculty Early Career Development Program, which "recognizes and supports the early career-development activities of those teacher-scholars who are most likely to become the academic leaders of the 21st century." CAREER Award recipients are selected on the basis of creative career-development plans that effectively integrate research and education within the context of the missions of their institutions.

Kosar, who holds a joint faculty appointment with the LSU Center for Computation & Technology, or CCT, proposed a project titled "Data-aware Distributed Computing for Enabling Large-scale Collaborative Science." NSF will fund this project for five years at \$400K.

Through his work on the CAREER grant, Kosar will develop new computing systems that manage data more effectively with automated processes, which enables scientists to spend more time focusing on their research questions and less time dealing with data.

"This project will not only impact computer science research by changing the way computing is performed, but it will also dramatically change how domain scientists perform their research by facilitating rapid analysis and sharing of raw data and results," Kosar said. "It will help the scientists start thinking about totally new scenarios where simulations are closely coupled with large amounts of observational and experimental data, which would revolutionize science, not just in the new scenarios but in the way it will bring the computational, theoretical, and experimental scientists together which currently live in very different communities and do not interact."

Kosar's integrated career plan will impact computational science disciplines from science and engineering to emerging research in the arts, humanities, business and education, which also need to deal with increasingly large amounts of data.

This project also involves education and outreach, as Kosar plans to let undergraduate and graduate students work alongside him in his research. Kosar will incorporate the project into the University's summer camp and outreach programs to students in the K-12 grades, and he plans to visit with students in Louisiana schools to discuss the project and encourage them to pursue careers in computational science and research.

"NSF selectively awards CAREER grants to young researchers who demonstrate extraordinary promise and a commitment to advancing science, and I am very proud of Tevfik for receiving it," said CCT Interim Director Stephen David Beck. "I am confident his research will yield results that not only enhance his academic work, but will benefit the greater research community."

Data storage and management is Kosar's research specialty at the University. In 2006, he received a \$1 million grant from NSF to create advanced data archival, processing and visualization capabilities across the state through the PetaShare project (www.petashare.org).

In December, Kosar led a team of researchers who unveiled a new software package, called Stork Data Scheduler, which makes it easier and more efficient for researchers to access and transfer large data sets (www.storkproject.org).

Apart from his research, Kosar also led a team of educators to develop a science and technology-oriented charter school in New Orleans, which allows students to work collaboratively with universities and be mentored by experienced scientists to enter into national and international science project competitions (www.abramsonst.org).

Kosar will begin work on this CAREER Award this semester.

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

# Red Stick Festival, 2theadvocate.com Partner to Offer Expanded Film Judging Opportunities

SOURCE: 2theadvocate.com

BATON ROUGE --- Do you have an eye for animation? Would you like the opportunity to screen films for the largest animation festival in the United States? The opportunity is only a click away, at 2theadvocate.com!

http://www.2theadvocate.com/entertainment/featured/38019864.html

#### **Opinion - Perspectives on advancements in distributed computing**

SOURCE: International Science Grid This Week

At an informal SC08 discussion titled "Traditional & Distributed HPC-What has changed? What remains the same?" participants — both users and developers — shared experiences and insights on the advancement of grid-based High Performance

Computing. Led by Gabrielle Allen and Daniel S. Katz of the LSU Center for Computation & Technology, and Gary Crane, SURA Director of IT Initiatives (including SURAgrid), the group identified several areas in which it believes grid technology needs to advance in order to deliver cost-effective service.

http://www.isgtw.org/?pid=1001590

## • **Upcoming Lectures:**

Richard D. Loft the Director for Technology Development in the Computational and Information Systems Laboratory of the National Center for Atmospheric Research (NCAR) will give a lecture titled "An Inconvenient Question: Are We Going To Get The Algorithms And Computing Technology We Need To Make Critical Climate Predictions In Time?" The lecture will take place Feb. 6 from 11 a.m. to noon in Johnston 338. There will be a reception before the lecture at 10:30.

#### **Please Note:**

- The NSF Cyberinfrastructure Software Sustainability Workshop will be held at the University Place Conference Center on the Indiana University-Purdue University Indianapolis campus in Indianapolis, Indiana. The workshop will focus on identifying strategies to create sustainable models for use, support, maintenance, and long-term sustainability of cyberinfrastructure software that is developed and used by research communities working in areas related to the NSF mission. Submission of position papers is open to the general community; position papers will be submitted via the workshop Web page http://cisoftwaresustainability.iu-pti.org. Position papers will be limited to three pages total. For more information about the workshop location see http://www.universityplace.iupui.edu/index.html and http://www.iupui.edu/.
- The 2009 CCT security badges are now ready to be picked up. They can be picked up in Frey 200 C1C. Please retrieve your security badges.
- The CCT Faculty Research Retreat has been rescheduled for Jan. 30 in 338 Johnston from 9 a.m. to 5 p.m.
- ALL CCT meetings of the Spring 2009 semester will take place Wednesdays at 3 p.m. in Johnston 338. If you have any information, news or announcements you wish to include at the meeting, please notify Karen Jones, kjones@cct.lsu.edu. ALL CCT meetings for this semester are scheduled for Feb. 11, March 18, April 15 and May 20. Please make every effort to attend.
- CCT will host Computational Science Poster Day, an initiative of faculty working on the CyberTools project, on April 17. This event is open to all undergraduate students in the state. Please encourage your students to submit ideas for a poster as they return to campus for the new semester! Poster abstracts are due Thursday, Feb. 12. Please visit http://www.cct.lsu.edu/posterday09 for more information.

- CCT is accepting applications from high schools to attend the CyberTools Boot Camp (July 6-10, 2009). If you have worked with Louisiana high school students and know of a school, teacher or students who might be interested, please notify Kathy Traxler, <a href="http://www.cct.lsu.edu">ktraxler@cct.lsu.edu</a>. More information about the camp is available online at: <a href="http://www.cct.lsu.edu/CyberToolsCamp09">http://www.cct.lsu.edu/CyberToolsCamp09</a>
- If you have any news for the CCT Weekly, please e-mail PR Manager Kristen Sunde directly at <a href="mailto:ksunde@cct.lsu.edu">ksunde@cct.lsu.edu</a>.

### **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

RFP--Amendment--Communications and Networking Technology ONR-BAA-07-012 February 16 2010 10:00 am <a href="https://www.fbo.gov/index?s=opportunity&mode=form&id=da7a0376fc5b9f2ffae2f66dd64b07dd&tab=core&cview=1">https://www.fbo.gov/index?s=opportunity&mode=form&id=da7a0376fc5b9f2ffae2f66dd64b07dd&tab=core&cview=1</a>

Physical Systems (CPS)
February 24 2009 10:00 am
At Most \$ 5,000,000.00 available
<a href="http://www.nsf.gov/pubs/2008/nsf08611/nsf08611.htm?govDel=USNSF\_30">http://www.nsf.gov/pubs/2008/nsf08611/nsf08611.htm?govDel=USNSF\_30</a>