## University of Bridgeport School of Engineering Recent Events and News

## January 2006

This newsletter may be viewed from our website: <u>www.bridgeport.edu/sed/news/main.htm</u>

Graduates from the School of Engineering are encouraged to contact us – Let us know where you are, what you are doing, etc. Please contact Susan Kristie <u>kristie@bridgeport.edu</u> We couldn't do this newsletter without you! Happy New Year! And Welcome to a New Semester!

Computer Science and Engineering undergraduate students Keyon Bennett, Wilfred Amuri, Bertrand Simon, Roger Hercules, Michael Williams, Wisam Yasen, Kenneth Amuri, Lyon Leslie, Eslam Gebrel, Venkata Vewlichety and Krishna Sidhdhapura attended the New England Board of Higher Education Annual Science Network Meeting. The event took place at MIT on October 22, 2005.

The School of Engineering and the ConnCAP program participated in the annual LEGO competition held at the Student Center on Saturday, December 3.

Anes Aref, a senior in the Computer Engineering program, presented a paper at the MEDI 2005 conference. The conference and exposition for leading and emerging suppliers, designers, manufacturers and developers of medical, pharmaceutical and biotechnology industries was held October 24 and 25 at the Connecticut Convention Center.

Prof. Hmurcik was recently hired by the U.S. Dept. of Justice to investigate an accident at McGuire Air Force Base in New Jersey. Dr. Hmurcik's investigation required knowledge of the digital control circuits governing several optical sensors.

Sampurna Shrestha (BS CpE 2002) has a job with Stonybrook University as Systems Administrator. He will complete his MSEE in May 2006.

Prashant Shrestha, (MS EE 2004), is living in Irving, Texas and is currently working for Citigroup Bank as the systems administrator.

Abdelshakour Abuzneid, Director of System Operations, has prepared a power point presentation and instructions for simple measures we should all be aware of to protect our PC's. He has given the presentation to students in the dorms, and the link to view this very informative presentation is on our website.

Professor Hmurcik (Electrical Engineering) was recently called in by Kaman Industries of Middletown to analyze their shock testing experiments. Kaman develops applications for explosives for military and commercial use. Their shock test experiments are conducted by dropping a device (electronic circuit board or control unit) to the ground with a force 10,000 times that of gravity. Dr. Hmurcik was able to validate much of their procedure and suggest improvements.

Dr. Navarun Gupta, Dr. Michael Xiong (Electrical Engineering), Dr. Joyce Hu (Mechanical Engineering) have submitted applications for grants from the Connecticut Conference of Independent Colleges/CT Center for Advanced Technology Catalyst Grant Program. The proposed activity will contribute to the goals of the National Aerospace Leadership Initiative, which has been created to respond to the critical needs of the US aerospace manufacturing supply chain. The activity will integrate with the NALI program activities. The focus of these activities is to:

- allow the United States to maintain its world leadership in advanced propulsion and power systems, as well as preserve an innovative and highly competitive domestic aerospace manufacturing supplier base to meet the Department of Defense's current and future needs;
- support U.S. leadership in aerospace research and development;
- fortify the U.S.-based manufacturing supply chain; and

• buttress our aerospace original equipment manufacturers' technology and production market share.

The proposed activity is in the following areas: Next Generation Manufacturing, Advanced Laser Applications Technology and Modeling and Simulation for Manufacturing. The titles of their proposals are: "Laser Micromaching for MEMS Accelerometer Application" (Dr. Xiong), "3-D Auditory Display for Navigating Aircrafts" (Dr. Gupta), "Modeling of the Laser Welding Process" (Dr. Hu).

Dr. Khaled Elleithy and Dr. Tarek Sobh, with Professor Toshio Fukuda from Japan, were the chairmen for the "International Joint Conferences on Computer, Information and Systems Sciences and Engineering" (CISSE). The conference was technically co-sponsored by the Institute of Electrical and Electronics Engineers (IEEE). The conference started on Sunday, December 11 and ended on Sunday, December 18.

The conference (http://www.cisse2005.org) was a smashing success! CISSE 2005 was the first Engineering/Computing Research Conference in the world to be completely conducted on-line in real-time via the internet. CISSE received 255 research paper submissions and the final program included 140 accepted papers, from more than 45 countries. The presentations, papers and time schedule for live presentations over the web were available for all registrants. The presentations were also recorded and will be part of the permanent CISSE archive, which will include all power point presentations, papers and recorded presentations, at

<u>http://www.cisse2005.org/schedule.aspx</u>. (Please use login: guestaccount, password: guest, to access the final program.)

A Synopsis: CISSE was a ground-breaking idea/experiment in many ways. It was the first very-high caliber research conference in engineering/computing conducted completely on-line/virtually. All aspects of the conference are managed on-line (not only the reviewing/submissions, registration, etc.) but also the actual conference. Materials (PowerPoint presentations and actual final manuscripts) were available to the participants several weeks before the conference, so they could pick and choose the presentations they wanted to attend and think about questions, etc. that they wanted to ask. Conference participants - authors, presenters and attendees - only needed an internet connection and sound available on their computers in order to be able to contribute and participate in this international ground-breaking conference. The on-line structure of this high-quality event allowed academic professionals and industry participants to contribute work and attend world-class technical presentations based on rigorously refereed submissions, live, without the need for investing significant travel funds or time out of the office. CISSE received submissions from more than 50 countries, for whose researchers, this presented a much more affordable, dynamic and well-planned event to attend and submit their work to, versus a classic, on-the-ground conference.

The CISSE conference audio room provided superb audio even over low speed internet connections, the ability to display PowerPoint presentations, and cross-platform compatibility (the conferencing software runs on Windows, Mac, and any other operating system that supports Java). In addition, the conferencing system allowed for an unlimited number of participants, which in turn granted us the opportunity to allow all CISSE participants to attend all presentations, as opposed to limiting the number of available seats for each session. The conferencing technology we have implemented, starting with the submission & review system and ending with the online conferencing capability, allowed us to conduct a very high quality, fulfilling event for all participants.