Welcome from the Chair

This last semester has been filled with interesting talks from excellent faculty candidates. I am very pleased to report that Dr. Swaroop Ghosh (Intel, Purdue) and Dr. Yao Liu (North Carolina State) have accepted tenure track positions in Computer Science and Engineering. We are also very pleased that Dr. Tina Kouri (Colorado School of Mines) will be joining us as an instructor and helping with advising. The new faculty will join us in August. We welcome them!

We wish Professors Dewey Rundus and Abe Kandel happy retirements. Their retirement date was May 5, 2012. They will be missed for their excellent teaching, leadership and scholarly contributions! As I write this, you can see there are some real changes happening this fall and more may shortly be announced.

Enrollment in our undergraduate Computer Science and Computer Engineering programs continues to grow. We are diligently working to be accessible and provide a high quality education. On the graduate level, we have had students win several prestigious NSF fellowships, best paper awards at workshops, an IEEE Computer Society scholarship, participate in patents and get quoted in the news for a study on cheating in online games. This speaks to the continued excellence in the graduate program which is a focus for growth.

We continue our efforts to build scholarships and now have our 30th Anniversary scholarship fund with its own fund number. It is up to about $5000 and the endowment goal is $25000. If we could just get 100 donations at the $200 level, we can provide perpetual support for a deserving undergraduate student! Please consider donating to the **220055 CSE Undergraduate Scholarship Fund** at:

https://usfweb2.usf.edu/foundation/asp/ssl/adfdn/funds.asp?dept=ESB&group=TG

Wishing you a great summer here in FL or wherever you may be (and please drop us an email with your news)!

Best Wishes,

Lawrence O. Hall
Professor and Chair
CSE and CUTR Collaboration

Four Patents and counting....

The Location-Aware Information Systems Laboratory functions as a collaboration between the Center for Urban Transportation Research (CUTR) and Computer Science and Engineering with a mission to improve the quality of life by collection of data through GPS-enabled phones and wireless sensor networks. Two CSE faculty, Dr. Miguel Labrador and Dr. Rafael Perez, and doctoral candidate, Sean Barbeau are researchers in this productive lab.

The Location-Aware Information Systems Lab has recently been granted four distinct US patents:

- **Travel Assistant Device (TAD)** to aid transit riders with special needs in successfully navigating the public transit system. With a GPS-enabled cell phone the rider can receive communications (cues include text messages and vibration alerts) from the system to enable safe and effective use of the transit system.

- **Dynamic Ride Matching System** is unique in its ability to match riders with occasional or one-time trips in addition to traditional reoccurring trips. A new spatial analysis technique using the shortest path solver enables more accurate ride matching data.

- **The Wireless Emergency-Reporting System** applies low-cost, scalable, technology already used by the public to augment intelligence gathering and enhance emergency communications. The high-tech Neighborhood Watch aspect of the invention enables the public to submit sound, pictures and video of suspicious activities directly to law enforcement. Another aspect of the system is its “reverse 911” component. When a threat to the public or individuals is identified, dispatchers could instantly relay a message to individuals with cell phones in a certain geographic area.

- **The Optimizing Performance of Location-aware Applications Using State Machines** patent details the software that recognizes when a cell phone remains in a certain location to reduce battery drain by increasing the time between location tracking activities.

Alumni Information

We hope that you will join our alumni LinkedIn Group. The purpose of the group is to enhance career growth opportunities for all our graduates. By keeping your LinkedIn profile current you will allow fellow graduates to follow your successes and will remain connected with each other and the Department. The group name is “USF Computer Science and Engineering alumni.” Join today!

(This group is managed from the Dept. and has no affiliation with the USF Alumni Association. We strongly encourage all of our graduates to join the USF Alumni Association and participate in its activities as well.)

University of South Florida, Department of Computer Science & Engineering
Spotlight on New Grants

Dr. Luther Palmer has received funding from the National Science Foundation for: BRIGE: Running Over Rough Terrain - Testing Recent Biological Hypotheses. The work seeks to enhance two biological hypotheses regarding the role of passive (tendons, ligaments) and active (muscles) elements during high-speed legged locomotion. A high-fidelity simulation environment will be used to assess the robustness, practicality and generality of these hypotheses.

Mehrgan Mostowfi and Dr. Ken Christensen, in partnership with Craig Woolley (Assistant Vice President for Administration and Support Services for Information Technology) were granted a USF Student Green Energy Fund of $50,000 to reduce the overall energy consumption and environmental impact of USF Tampa campus through design, implementation and evaluation of scheduling methods to utilize power-saving modes in campus PCs. The three-year project is titled, “Reducing Electricity Consumption at USF by Using State-of-the-Art Methods to Power Manage Desktop Computers.”

Dr. Ken Christensen and Dr. Reviriego of the Universidad Antonio de Nebrija (Madrid, Spain), were granted a Google Research Award to explore new network protocol semantics and primitives to enable coordinated scheduling of data bursts across multiple time scales and protocol layers to achieve energy savings in client devices and potentially also in servers within data centers. This one-year project will also provide for an REU student to assist a graduate student in completing the research. For this project, new scheduling methods will be designed, modeled and implemented. A prototype will be evaluated to be able to predict the expected large-scale energy savings and performance trade-offs from the new methods.

CSE Faculty Service

Prof. Sudeep Sarkar was appointed as an Associate Editor of the IEEE Transactions on Pattern Analysis and Machine Intelligence. T-PAMI is one of the highest impact journals in its field. Dr. Sarkar will be handling papers in Computer Vision.

Dr. Yu Sun has been appointed Associate Editor of IEEE Robotics and Automation Magazine for a three-year term beginning January 1, 2012.

Prof. Miguel Labrador has been invited for a one-year term on the Computing Research Association Education Committee.

The IEEE Publication Services and Products Board appointed Dr. Dmitry Goldgof as a member of the IEEE Press Editorial Board for the 2012-2014 term. The committee anticipates that Dr. Goldgof’s service will make the board more diverse in its representation of IEEE’s technical fields of interest. His principal responsibility, as a board member, will be to review proposals for book projects.
Teaching Award

Excellence in teaching

Dr. Jing Wang received the Outstanding Undergraduate Teaching Award for 2010-11 from Vice Provost Kofi Glover in her popular Computer Animation class on Nov. 3. The students applauded this great achievement and recognition of excellence in teaching.

Student Awards

Student accomplishments in research and scholarship

Matt Morrison, PhD candidate under Prof. Ranganathan, has been awarded a scholarship to attend the ACM A.M. Turing Centenary Celebration this June, in San Francisco. The Celebration, the 100th anniversary of Alan Turing’s birth, will reflect on the history and future of computing with 33 past winners of the Turing Award in attendance.

Saurabh Kotiyal, another PhD student of Prof. Ranganathan, has been named one of the winners for the 2011 Richard E. Merwin Student Scholarship - “For demonstrating outstanding involvement in an IEEE Computer Society Student Chapter, excellence in academic achievement, and promise in future efforts”.

Sergiy Fefilatyev, Kurt Kramer, Larry Hall, and Dmitry Goldgof along with their colleagues from USF’s College of Marine Science won Data Mining Practice Prize with Honorable Mention for their research paper titled “Detection of Anomalous Particles from Deepwater Horizon Oil Spill Using SIPPER3 Underwater Imaging Platform” at the Data Mining Case Studies workshop within the IEEE International Conference on Data Mining 2011.

Oscar Lara Yejas and Jose Cadena received a 2011 College of Engineering Research Week Poster Award for the work titled: “Vigilante: A Mobile Platform for Real-time Human Activity Recognition.” Their advisor is Prof. Miguel Labrador. The award carries a $500 travel grant.

Matt Lewandowski’s and Richard Meana’s poster titled: “A Novel Method for Watermarking Sequential Circuits,” was awarded a 2011 College of Engineering Research Poster award. Their advisor is Prof. Srinivas Katkoori.