Welcome ECE Students!

ECE Chair’s Message

On behalf of the ECE faculty and staff I’d like to welcome our new students - freshmen, transfers and graduate students! As you start your UML experience I encourage you to get involved in many research activities, service learning and student groups offered by the ECE Department and the College of Engineering. Some of the examples include the IEEE, Eta Kappa Nu, Society of Hispanic Professional Engineers, Society of Women Engineers and the National Society of Black Engineers. I assure you that your University experience will be much richer if you get involved!

This newsletter and future editions will include profiles of your fellow students who have gotten involved and enriched their educational experience. For instance, ECE has a significant number of undergrads who work with faculty on their research. ECE research projects can provide opportunities for travel and to present your work at professional conferences.

If you have a story about your experience as an ECE student let us know! Have a productive semester! --Professor Martin Margala

Prof. Oliver Ibe Publishes New Book

Professor Oliver Ibe has recently published his seventh book titled *Fundamentals of Stochastic Networks* by Wiley. According to the publisher, “In today's era of interdisciplinary studies and research activities, network models are becoming increasingly important in various areas where they have not regularly been used. Combining techniques from stochastic processes and graph theory to analyze the behavior of networks, *Fundamentals of Stochastic Networks* provides an interdisciplinary approach by including practical applications of these stochastic networks in various fields of study, from engineering and operations management to communications and the physical sciences.”

Prof. Ibe is an Associate Professor in the ECE department at the University of Massachusetts at Lowell. He earned his doctoral degree from MIT, and has more than thirty years of experience in academia and the telecommunications industry in various technical and management capacities. Dr. Ibe's research interests include stochastic systems modeling, bioinformatics, and communication network performance modeling.
Newly Tenured ECE Faculty Members

Professors Yan Luo and Joel Therrien have recently been promoted to associate professors with tenure by the Board of Trustee of the University of Massachusetts.

Prof. Yan Luo joined the department in August 2005 as an assistant professor after obtaining his PhD from University of California Riverside. While at UMass Lowell, he leads a vibrant research group on designing high performance network systems and multicore processors. He has been the PI of a number of research projects funded by NSF, Intel, BBN and other funding agencies, and published over 30 peer-reviewed full-length papers in journals and ACM/IEEE conferences, one of which won the best paper award. He has graduated five MS students and is currently advising three PhD students. Prof. Luo has been recognized by the research community due to his contribution in the field, and frequently invited to chair conference sessions, serve on conference program committees, and review journal manuscripts. More information about Prof. Yan Luo and his research is available at [http://cans.uml.edu/](http://cans.uml.edu/).

Prof. Joel Therrien joined the department in August of 2005 as an assistant professor after a postdoctoral fellowship with the NASA Institute for Nanoelectronics And Computing at Purdue. He received his Ph.D. in condensed matter physics from the U. of Illinois at Urbana-Champaign in 2002. Since joining the ECE department at UML, he has worked on projects funded by NSF as well as Army and Air Force Research Labs. He has developed a strong research collaboration with Varian Semiconductor Equipment Associates. His research is focused on two dimensional semiconductors, such as graphene, silicon carbide for applications in MEMS, transistors, and photovoltaics, and on using living cells as sensing elements in biosensors. Prof. Therrien has been invited to give numerous talks including at the U. of Connecticut as well as Nanjing University in China.

Newly Joined ECE Faculty Members

Dr. Ahmed AbuHajar joined the Department as a Lecturer in 2011. He has earned a Ph.D. in Electrical Engineering in 2002, MS in Engineering Management in 2004 and MS in Electrical Engineering in 1998, all are from the University of South Florida. He also earned a BS in Electrical Engineering in 1993 from the University of Idaho. Ahmed brings with him a rich teaching experience as he had taught fifteen different courses at the graduate and undergraduate levels at four different universities- University of South Florida, Florida International University, San Jose State University and San Francisco State University. Ahmed is a strong believer in Educational Technology- A technology that is geared toward improving the quality of education at all levels (k-12) and higher learning.

Dr. Michael Geiger is a Lecturer in the Electrical & Computer Engineering Department at UMass Lowell. His general scholarly interests include computer architecture and embedded system design. Prior to joining the university, he worked as an Assistant Professor in the Electrical & Computer Engineering and Computer & Information Science Departments at UMass Dartmouth. Michael earned his Ph.D. and M.S.E. in Computer Science & Engineering from the University of Michigan, where his doctoral work focused on the design of cache architectures to improve energy consumption. He earned his B.S. in Electrical Engineering from Cornell University.
Dr. Omer Khan is an Assistant Professor of Electrical and Computer Engineering at the University of Massachusetts, Lowell. He also serves as a Research Affiliate in the Computer Science and Artificial Intelligence Laboratory (CSAIL) at Massachusetts Institute of Technology (MIT). During 2010-11, he was a Research Scientist at MIT. He received the Ph.D. degree in Electrical and Computer Engineering from the University of Massachusetts, Amherst in 2009. His teaching and research interests can be generalized to the field of Computer Architecture. In particular, he is interested in Multicores and Parallel Architectures; Situational Computing; Memory, Low-Power, On-chip Network, Heterogeneous, and Dependable Architectures; Hardware/Software Co-design of Computing Systems; and VLSI. He also has more than seven years of industry experience at leading computer and semiconductor companies, Motorola (now Freescale) and Intel. He is a member of the IEEE. More information about Prof. Khan is at http://www.uml.edu/Engineering/Electrical-Computer/faculty/Khan-Omer.aspx

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Student Advisory Committee Meets with ECE Chair

Student Advisory Committee (SAC) had the first meeting of fall 2011 semester on Sept 30, 2011. The SAC members met with the Department Chair Prof. Martin Margala and ABET coordinator Prof. Yan Luo to discuss the missions and plans of the SAC in the coming year.

The SAC is formed by the student body to provide feedbacks on all the aspects of the ECE department and the BS programs in both Electrical Engineering and Computer Engineering. The SAC consists of students from every year of study and every major (EE and CpE). The Department believes that students play an important role in promoting the learning experience at the Department, helping the faculty members evaluate the pedagogy, and advocating the emerging needs of students. These are especially important to the ABET accreditation process the Department has been involved in the past and in the near future. The SAC members are charged with the task to provide feedbacks through various means to the department faculty who are committed to constantly improve our programs.

The next SAC meeting will be scheduled towards the end of the semester.

The SAC members include: Freshman students Mudassir Ali, Tim Starr, Amanda Flores; Sophomore students Sez-Jade Chen, Kardam Soni, Andrew Hajj, Robert Chim; Junior students Chris Ventullo, John Wakim, David Harrington, Erin Webster; and Senior students David Cote, John Foley, Matt Seaver.
Welcome Our New PhD Students!

The ECE department experiences significant growth in the number of graduate students, especially PhD students in 2011. We have currently 58 doctoral students in our ECE program: 48 PhD students in Electrical Engineering, three DEng students and 7 PhD students in Computer Engineering. Among the PhD students, 21 of them joined ECE doctoral program in 2011! WELCOME to ECE @ UML!

On Sept 27, the Department held our first PhD students welcome gathering, where students and faculty members had wonderful social time, and learned much about the campus library resources from the librarian Margaret Manion.

The names of the new PhD students joined in Spring, Summer, Fall 2011 are listed as follows:

Fall Computer Engineering: Calloway, Thomas Alan; Hijaz, Farrukh; Li, Peilong

Fall Electrical Engineering: Ait El Aoud, Yassine; Al Shawabkeh, Ibrahim; Fassinou, Fidegnon Simon; Haghzadeh, Mahdi; Jamil, Adnan; LeRow, Kevin Edward; Li, Peilong; Mahboob, Mohammad Marzan; Mahoney, David Andrew; Mojaverian, Neda; Vakil, Mohammad Imran; Willis, Matthew Mark

Spring & Summer Electrical Engineering: Dai, Lian; Devarakonda, Lalitha Srigouri; Li, Yancen; Tran, Vu Anh; Wang, Haifeng; Nguyen, Jack; Zhang, Tenglong

(In picture with Prof. Martin Margala are eight new PhD students from left to right: Mahdi Haghzadeh, Lian Dai, Yanceng Li, Adnan Jamil, Haifeng Wang, Farrukh Hijaz, Peilong Li and Hang Yin.)