Salameh’s “Sleeping Beauty”

One of Professor Ziyad Salameh’s many published papers was recognized as a “Sleeping Beauty” by the January 2011 issue of Research Trend, a newsletter providing objective, up-to-minute insight into scientific trends based on bibliometric analysis.

Sleeping beauty was used by scholars to recognize scientific articles that are very scarcely cited in the immediate years following their publication, but then become highly cited in later years. According to Research Trend, “Sleeping Beauties can reflect premature discoveries that the broader scientific community is not ready to recognize as a breakthrough at the time the research is published”, and one example is the paper by Einstein, Podolsky, and Rosen (EPR) on quantum mechanics published in Physical Review in 1935, which “remained mostly uncited until experimental techniques had developed in the late 80s and early 90s to the point where some of the predictions of the EPR paper could be meaningfully tested.”

Prof. Salameh’s sleeping beauty is the paper titled “methodology for optimally sizing the combination of a battery bank and PV array in a wind/PV hybrid system” published in IEEE Transactions on Energy Conversion in June 1996. The paper has been cited for over 120 times. Professor Salameh said, “I think we were looking 15 years ahead of our time: I believed then in renewable energy as a way of the future to add/generate electricity and to reduce pollution. Now, research in renewable energy has become fashionable. All over the world, ‘renewable energy’ has become a buzz word, with even politicians jumping on the bandwagon.”

Prof. Anh Tran Wins Best Teacher Award

Prof. Anh Tran was recognized as the winner of the 2010 Teacher Award for the College of Engineering, sponsored by the Student Government Association (SGA) of University of Massachusetts Lowell.

Prof. Tran has been nominated by students at UMass Lowell for “going above and beyond and exceeding excellence in teaching”, said in the email from Jessica Lindroth, the chair of academic affairs of SGA. The recipient of the teaching award was selected through direct voting from UMass Lowell students. Prof. Tran was invited to the Awards Banquet held in Cumnock Auditorium.

Prof. Martin Margala Interviewed by Intel TV

Prof. Martin Margala was interviewed recently by Intel TV, a network TV program sponsored by Intel Corporation to highlight the state-of-art research in microprocessor technologies. Prof. Margala and his collaborator Dr. Wim A. Vanderbauwhede at University of Glasgow talked about their high throughout discrete cosine transform (DCT) implementation using 1000 processors, a remarkable design in the current multicore processor era.

Prof. Margala and his team used a Field Programmable Gate Array (FPGA) to configure the chip into specific circuits. By creating more than 1,000 mini-circuits within the FPGA chip, the researchers effectively instantiated 1,000 independent programmable cores on a single chip. This so called MORA processor can execute DCT and many other multimedia algorithms in parallel. The MORA architecture is targeted for next generation high performance and low power multimedia applications.


Prof. Kanti Prasad Organize ASEE Conference

Prof. Kanti Prasad served on the organization committee of ASEE Northeastern Section Conference. He along with Prof. David Kazmer met other committee members to finalize the program for ASEE’s North-Eastern section Conference to be held in Hartford University on April 29-30, 2011. The next year’s conference will be held on April 27-28th at the Inn and Conference Center of University of Massachusetts Lowell.
Prof. Samson Mil’shtein Publishes in International Conferences

Prof. Samson Mil’shtein and his research team have recently published nine research papers on a variety of topics such as “contactless fingerprinting” and “high efficiency solar cell”. The following is a partial list of the papers.


S. Mil’shtein, A. Pillai, V. Oliyil Kunnil, M. Baier, P. Bustos, “Application of Contactless Fingerprinting” (chapter to book); Chapter I in BIOMETRICS, editor M. Svijic, Verlag, March 15, 2011.

Graduate Student Michael Baier Presents Papers in Portugal

ECE graduate student Michael Baier traveled to Algarve, Portugal to attend two separate international conferences between March 2 and March 15, 2011. At the first conference, “International Conference on Pervasive and Embedded Computing and Communication Systems” (PECCS), Michael represented UMass and his teammates at the Advanced Electronic Technology Center by giving an oral presentation on their paper titled “Automatic Contactless Mobile Fingerprinting System”. This paper describes the development of AETC’s mobile and contactless fingerprinting technology, and was co-authored by S. Foret, V. Oliyil Kunnil, M. Paradis, P. Bustos, and S. Mil’shtein.

At the second conference, International Conference on Computer Vision Theory and Applications (VISAPP), Mike presented a poster on the paper titled “Algorithms for binarizing, Aligning, and recognition of Fingerprints” which was coauthored by graduate student A. Pillai and their advisor Prof. S. Mil’shtein.


Editor’s Note: We regularly present profiles of our wonderful student researchers and postdocs. Please email Prof. Yan Luo (yan_luo@uml.edu) to introduce your ECE team members.

Dr. Sohan Purohit
Ph.D. in Electrical and Computer Engineering
University of Massachusetts Lowell (2007-2011)

Dr. Purohit has joined Intel Corporation! Congratulations!

Ambarish Roy has been researching on RF/MMIC/MEMS technologies since 2006. His current interests are in the fields of MEMS & Microsystems including BAW Resonators and RF/MMIC modeling. He became a member of IEEE in 2005 and the honor society of Tau Beta Pi in 2008.

During these few years he has attained many achievements which have enhanced his professional career. His recent achievements include serving as the Chairperson for the MMIC session in International Symposium of Microwave and Optical Technology for which he has been invited again in Prague, Czech Republic. He has also been invited to author a chapter on RF-MEMS. He has several publications and have twice won the best student paper award with the IEEE. He was also awarded the Outstanding Graduate Student award in the ECE Dept. for 2009.

Apart from academics, his hobbies include sketching, painting, traveling, and ballroom dancing. He prefers sketching 'abstract' still life. He has been dancing the popular ballroom dances since Spring 2009 and has competed in many collegiate ballroom competitions including the MIT Open, where he has won several awards. His favorite dances are the Tango, Viennese Waltz and Quickstep. He is also an Officer for the Graduate Employee Organization since 2009 dealing with RA/TA issues in the University.

He is currently finishing his Ph.D. dissertation on 'MEMS BAW Resonators-Effective Parameter Modeling and Characterization'. His public profile can be viewed at: https://sites.google.com/site/royambarish/