

EE Alumni: International Educators

This issue of EE Connections covers EE alumni who currently hold academic positions at international universities. Six EE educators bring back their memories of studying at ASU. They also talk about their current responsibilities, research work, family life, and more.

EE Connections is our venue for sharing and exchanging. We are trying to keep in touch with all alumni and hope to hear from you too. Please email us your career updates at eeinfo@asu.edu.

See you next issue!



Elias Kyriakides
University of Cyprus

Dr. Elias Kyriakides received his Ph.D. degree in 2003. Currently, he is a lecturer in the Department of Electrical and Computer Engineering at the University of Cyprus.

While at ASU, he worked under the supervision of Regents' Professor Gerald T. Heydt. In 2004, he was the recipient of the Palais Outstanding Doctoral Student Award.

Dr. Kyriakides is working in the area of electric power engineering. His research work includes power system optimization and security enhancement, use of synchronized measurements in power systems, renewable energy sources, and synchronous machines. He is teaching courses in power system analysis, power system operation and planning, and electric machines. He is also a founding member of the Research Center for Intelligent Systems and Networks at the University of Cyprus. He has published more than 30 journal and conference papers.

"At ASU, I was shaped as a researcher and educator. I had the opportunity to perform state of the art research in electric power engineering and learn from the best researchers and educators in the field. My advisor, Regents' Professor Gerald T. Heydt had welcomed me into his research team with enthusiasm from the first day I set foot in the EE department. We had a wonderful collaboration while there, and we still continue this collaboration despite the 7,200 mile distance that separates our offices."

"I was fortunate to collaborate with Professors Vijay Vittal and Richard Farmer who also had a positive influence on me through both their high academic standards and their impeccable professional ethics. I also appreciate the genuine interest that Professor Joseph Palais had shown in my progress over the years."

Keep in touch with EE. Please e-mail your career updates to eeinfo@asu.edu.



José-Job Flores-Godoy
Universidad Iberoamericana, Mexico

Dr. José-Job Flores-Godoy graduated in December 2002. His advisor was Prof. Kostas S. Tsakalis. Upon his return to Mexico City, he joined the Departamento de Física y Matemáticas at Universidad Iberoamericana as an Assistant Professor. His research interests include control theory and complex networks. He has been the technical reviewer for two books translated into Spanish for McGraw-Hill and two books published by Grupo Editorial Patria.

Dr. Flores-Godoy shares his experiences while at ASU. "My times there were among the best in my life, since several important facts had taken place. For one, the opportunity to study abroad in a very different setting from my home town was a thrill from the very beginning. Secondly, for the first time in my life, I was exposed to the diversity of cultures that ASU offers, which gave me the opportunity to make friends with other students from different backgrounds. This has enriched my life in every aspect. Importantly, my professors were always kind and eager to help all of us." These days, he still keeps in touch with some of the friends he made while he was at ASU, and "I would like to think that this will last all my life," says Dr. Flores-Godoy.

Message from the Department Chair



Our last newsletter (Fall 2007) highlighted alumni who have held faculty positions at U.S. universities. This newsletter recognizes alumni who are faculty members around the world. All of the continents are represented, except Australia and Antarctica. The majority are in Asia, perhaps reflecting the world's fastest growing economies.

If we overlooked your success, please let us know.

Stephen M. Phillips, Ph.D., P.E.
Professor and Chair

Inside this edition

E. O'Neill Carrillo2
N. Senroy2
B. M. Han2
A. Polycarpou3
EE International Educators3
Support EE4



Efraín O'Neill Carrillo, UPRM

Efraín O'Neill Carrillo obtained a Ph.D. in EE in 1999 under the supervision of Prof. G.T. Heydt, in the area of power systems. He is currently Professor of the Electrical and Computer Engineering (ECE) Department at the University of Puerto Rico-Mayagüez (UPRM), the Director of the Institute for Tropical Energy, Environment and Society, and the Engineering Coordinator for Social, Ethical and Global Issues. His research centers around power quality, power distribution systems, engineering education and policy, power electronics, load modeling, and social implications of technology.

One of the most influential experiences at ASU was his participation in Preparing Future Faculty (PFF), a professional development program for students interested in academic careers. It allowed him to interact with faculty, administrators, and other graduate students from diverse disciplines. Prof. O'Neill also learned about Ernest Boyer's holistic approach to faculty life, which has guided his teaching and research career.

At UPRM, he has been responsible for providing academic and administrative support for undergraduate and graduate courses in power systems and power electronics. He led a group of 10 professors in efforts to develop research/teaching proposals and industry collaborations, resulting in five major research and education awards, including NSF's Major Research Instrumentation Award. He has authored or co-authored over 40 journal and conference papers, and has presented his work at both international and national conferences.

Dr. O'Neill is a firm believer of the balanced scholarship proposed by Ernest Boyer in his classic work *Scholarship Reconsidered* (1990), where teaching, research and service are equally regarded

as valuable components of scholarly activity. His views and work on integrative research and education activities, and his professional service have earned him an Outstanding ECE Professor of the Year Award twice for the 2001-2002 and the 2004-2005 academic years, and the IEEE/PES Walter Fee Outstanding Young Engineer Award in June 2005.



Nilanjan Senroy
Indian Institute of Technology, India

After graduating from ASU in 2006, Dr. Nilanjan Senroy worked for a year as a post-doctoral fellow at the Center for Advanced Power Systems, Florida State University in Tallahassee. In 2007, he joined the Electrical Engineering Department of the Indian Institute of Technology, New Delhi, India as an Assistant Professor.

While at ASU, Dr. Senroy's doctoral advisor was Prof. G.T. Heydt. His time at ASU was extremely fruitful because he was exposed to some of the most eminent experts in power system stability and control. These include, in addition to his advisor, Dr. Vijay Vittal (with whom he co-authored a journal publication) and Prof. R. G. Farmer.

"These professors left lasting impressions on my mind, and my research techniques and lines of thinking reflect those impressions. I was also exposed to sophisticated computational tools in power system studies during my stay here. I would also like to mention the friendship and camaraderie I got from the highly talented bunch of international students who kept me alive."

Dr. Senroy is currently working on applying signal processing techniques to analyzing the stability of power systems and solving problems in the quality of power delivered. He has one patent filed last year in Florida. The patent is a signal processing technique to separate out closely spaced frequency components in a time-varying distorted waveform using empirical mode decomposition. It is used to study the variations in the torque, speed and field current of the ship propeller motor. In addition, Dr. Senroy has numerous journal and conference publications.



Byung M. Han
Myongji University, South Korea

Graduated in 1992, Dr. Byung M. Han is currently Professor and Chairman of the Department of Electrical Engineering, Myongji University, South Korea. He worked under Prof. Karady while at ASU. A leading researcher and educator in the field of power converter application for transmission and distribution systems, Prof. Han has been involved in teaching and supervising more than 30 M.S. and 3 Ph.D. students.

Prof. Han made significant contributions to power electronics application for transmission and distribution system through several novel approaches. First, he developed a new structure of power converter for FACTS (Flexible AC Transmission System) and Custom Power Application. He proposed a multi-bridge converter for SSSC (Static Synchronous Series Compensator) and UPQC (Universal Power Quality Conditioner) application in order to increase the converter operation voltage without series connection of switching units. His also introduced a soft-switching current source converter for FACTS and renewable power source interconnection. He developed a new PLL (Phase-Locked Loop) system based on DSP (Digital Signal Processor) that is critical for the performance of power converters in power systems. He developed a novel structure of PLL algorithm using adaptive linear combiner, which is based on a neural network approach. His fourth contribution was to develop a combined operation scheme of UPQC and distributed generation for premium power supply.

In recognition of his achievements, Prof. Han won a best paper award in 1998 and 1999 from KIEE (Korean Institute of Electrical Engineers) and KOFST (Korean Federation of Science and Technology Societies). He twice won an official citation from the Minister of Commerce, Industry and Energy of Korea in 1999 and 2005 for making great achievements in FACTS and Custom Power research. He has worked as an active member in KIEE, serving as an editor and a chairman of power electronics group.



Anastasis Polycarpou
University of Nicosia, Cyprus

Dr. Anastasis Polycarpou is Professor at the University of Nicosia in Cyprus. He is teaching Electrical and Computer Engineering courses, and he is involved in research in the area of Computational Electromagnetics. He publishes on a regular basis in the IEEE or IET and mainly attends local European conferences. He has recently authored a book on "The Finite Element Method in Electromagnetics" and is currently working on a second one. He is actively involved in program curriculum development, school and departmental committees, and other extra-curricula activities.

He received his B.S., M.S., and Ph.D. in Electrical Engineering in 1992, 1994, and 1998, respectively. During his undergraduate studies, he received the Regent's scholarship for international students, and during his graduate studies, he received the DeMund scholarship and the Regents' graduate academic scholarship for a number of years. He joined the Computational ElectroMagnetics (CEM) Group under the guidance and supervision of Regents' Professor Constantine Balanis. In this group, he had the opportunity to work on a number of funded real-world types of projects sponsored by renowned organizations such as NASA, US Navy, US Army, and Boeing.

"Prof. Balanis has given me the opportunity to work in a highly demanding research environment, acquire knowledge and research skills, gain confidence and direction, and more importantly, develop professionally in a very competitive academic world. He was a demanding advisor but very supportive. He deeply cared about his students," says Dr. Polycarpou. "I also remember Prof. Jim Aberle, who was a dear friend and always eager to help every time we had difficulties."

Dr. Polycarpou is married and has a lovely daughter named Christina. He lives with his family in a suburb of Nicosia. On weekends, they like to visit Grandma and Grandpa who live in another nearby city.

EE Alumni International Educators : WHO's WHO

Hasan H. Erkaya, Professor, Electrical-Electronics Engineering, Eskisehir Osmangazi University, Turkey, Advisor: Prof. Ronald Roedel, Year: 1988

Gamal Fahmy, Lecturer, Electronics, Communications & Networks, German University in Cairo, Advisor: Prof. Sethuraman Panchanathan, Year: 2003

José-Job Flores-Godoy, Assistant Professor, Departamento de Física y Matemáticas, Universidad Iberoamericana, México, Advisor: Prof. Konstantinos Tsakalis, Year: 2002

Tansal Gucluoglu, Assistant Professor, Electronics Engineering, Kadir Has University, Istanbul, Turkey, Advisor: Prof. Tolga Duman, Year: 2006

Byung Moon Han, Professor/Chairman, College of Engineering, Myongji University, South Korea, Advisor: Prof. George Karady, Year: 1992

Yassin M.Y. Hasan, Assistant Professor, Electrical Engineering, Assiut University, Egypt, Advisor: Associate Prof. Lina Karam, Year: 2000

Qi Huang, Associate Professor, Automation Engineering, University of Electronics Science and Technology of China, Advisor: Prof. George Karady, Year: 2006

I.G. Hwang, Professor, Electrical Engineering, Jeonju University, South Korea, Advisor: Prof. Dieter Schroder, Year: 1992

Elias Kyriakides, Lecturer, Electrical and Computer Engineering, University of Cyprus, Advisor: Prof. Gerald Heydt, Year: 2003

Ali Manzak, Assistant Professor, Electrical Engineering, Lakehead University, Canada, Advisor: Prof. Chaitali Chakrabarti, Year: 2001

Mansour Mohamed, Assistant Professor, Aljouf University at Skaka, Saudi Arabia, Advisor: Prof. George Karady, Year: 2003

Natthaphob Nimpitiwan, Assistant Professor, Electrical Engineering, Bangkok University, Thailand, Advisor: Prof. Gerald Heydt, Year: 2006

Efrain O'Neill-Carrillo, Professor, Electrical and Computer Engineering, University of Puerto Rico-Mayaguez, Advisor: Prof. Gerald Heydt, Year: 1999

Se-Hoon Park, Professor, Electrical & Information Industrial Engineering, Andong National University, South Korea, Advisor: Prof. Dieter Schroder, Year: 1992

Seong-Ook Park, Associate Professor, School of Engineering, Information and Communication University, South Korea, Advisor: Prof. Constantine Balanis, Year: 1997

Anastasis Polycarpou, Professor, Electrical and Computer Engineering, University of Nicosia, Cyprus, Advisor: Prof. Constantine Balanis, Year: 1998

Carlo Requião da Cunha, Associate Professor, Electrical Engineering, Federal University of Santa Catarina, Brazil, Advisor: Prof. David Ferry, Year: 2005

Nilanjan Senroy, Assistant Professor, Electrical Engineering, Indian Institute of Technology, India, Advisor: Prof. Gerald Heydt, Year: 2006

John Tartar, Emeritus Faculty, Computing Science, University of Alberta, Canada, Year: 1967

Tony Yuk, Lecturer, Electrical and Electronic Engineering, University of Hong Kong, Advisor: Prof. Joseph Palais, Year: 1986

Did we miss you? Keep in touch with us, please email your career updates to eeinfo@asu.edu.

Support Electrical Engineering

Electrical Engineering Alumni Newsletter

This publication is written, designed and produced by the Department of Electrical Engineering of the Ira A. Fulton School of Engineering at Arizona State University for distribution to alumni, industry partners and academic friends worldwide.

Department of Electrical Engineering
ASU Box 875706
Tempe, AZ 85287-5706
Phone: (480) 965-3424 E-mail: eeinfo@asu.edu
www.fulton.asu.edu/~eee
Editors: Dr. Joseph Palais, Tanita Saenkhum

© 2008 Arizona State University. All rights reserved. The sunburst logo is a registered trademark, and the Arizona State University word mark is a trademark of Arizona State University. All other brands, product names, company names, trademarks and service marks used herein are the property of their respective owners. Information in this document is for informational purposes only and is subject to change without notice.

Giving Back

In celebration of the Ira A. Fulton School of Engineering's 50th Anniversary, we invite you to celebrate your alumni status and make a gift in support of the department of Electrical Engineering. Your gift is essential in propelling our department into the next 50 years of innovation and success by allowing us to:

- Provide the best education and research opportunities for students
- Attract the most highly regarded and knowledgeable faculty
- Create new opportunities in research, learning and innovation through cutting-edge technology
- Progress to the top level of electrical engineering schools nationally
- Improve the quality of life in the communities we serve

To make a gift:

- **Call** Kendra Quandt at 480.727.7600
- **Go online** to www.asufoundation.org and click the gold "Give Now" button. Select "Other" when asked to "Select a college or unit to donate to." Then type "Electrical Engineering" in the box that appears below asking you to "indicate the name of the fund."
- **Mail** your gift to – ASU Foundation, Gift Processing, PO Box 2260, Tempe, AZ 85280-2260. Checks should be made payable to "ASU Foundation" with "Electrical Engineering" noted on the memo line.



Electrical Engineering Department
Arizona State University Main
Box 875706
Tempe, AZ 85287-5706
