

DEPARTMENT OF

UNIVERSITY OF FLORIDA

Electrical & Computer Engineering

FALL 2012

SEE PAGE 4

COGNITION,
CONTROL,
COMPLEXITY:

What do these words mean?

RENOWNED SCHOLAR
AND RESEARCHER

DR. SEAN MEYN
JOINS FACULTY

UF UNIVERSITY of
FLORIDA

Electrical & Computer Engineering

Established in 1910, the Department of Electrical and Computer Engineering has built an international reputation for excellence in teaching, research and service. The department is housed in three buildings: Larsen Hall, Benton Hall and the New Engineering Building.

ECE BY THE NUMBERS

- ▶ Ranked **32nd** best ECE graduate program in the USA according to U.S. News & World Report
- ▶ **39** Tenured/Tenure-Track Faculty
- ▶ **630** undergraduate students as of Fall 2011
- ▶ **616** graduate students as of Fall 2011
- ▶ **2,300** graduate applications for Fall 2012
- ▶ **\$14 million** research expenditures per year
- ▶ **15** IEEE Fellows

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Message from the Department Chair



I am pleased to present our newly revamped ECE Department newsletter. After two years as interim chair, I was selected as permanent chair of ECE in August 2011. I am honored and will do all I can to lead the department to excellence. From focusing on my own research and teaching to now running a large department, this has been quite a transition.

The ECE department continues to excel in both teaching and research in spite of yearly state budget cuts. Our department research expenditures totaled about \$14 million per year for the past two fiscal years, the highest totals in our history and the highest of any department in the college. I am proud of our faculty and staff for all of their hard work. As you will read in this newsletter, our faculty, staff and students have received many honors and awards. You can read about the excellent faculty we recently hired. This past year we moved from 35th to 32nd in the *U.S. News & World Report* ranking of graduate ECE programs. My goal for the department is to reach the top 20

ECE programs in the country.

Faculty service is an important component of a well-run department. I am especially thankful for the faculty who form the department administration:

TOSHI NISHIDA, associate chair for research, is heavily involved in renovating our department website as well as creating infrastructure for the development of successful research center proposals. Toshi is exploring collaborative research spaces, literally breaking down the walls between research laboratories to encourage more interaction between research groups.

ROB FOX, associate chair for academics, chairs our curriculum committee and is helping develop innovative teaching methods. For example, we will be “flipping the classroom” in our first circuits course. During the fall 2012 semester we will record the lectures, and in the spring, the students will watch the lectures at home and conduct group problem solving in class.

HENRY ZMUDA, undergraduate coordinator, heads up our ABET degree accreditation process. Henry is working diligently to ensure that our fall re-accreditation goes smoothly.

GIJS BOSMAN, graduate coordinator, is overseeing the smooth running of our graduate program. We have tremendous interest in our graduate program with more than 2,000 applications from all over the world every year.

An important goal is to improve industry and alumni outreach. Toward this goal, we hired **Erin Hodge** last year to lead development efforts for the department. Erin and I have visited alumni and corporate leaders throughout the country. Recently, we visited northern California and met with alumni at various companies including Google, Apple, Oracle, NVIDIA and Cadence. We encourage our alumni to visit, lecture and participate in events on campus. Our current students enjoy seeing successful alumni and learning from them.

Thank you for reading our updated newsletter, whether you are an alumnus, current or prospective student, parent, staff, faculty member or just a friend. Please keep in touch, and we welcome a visit when you are in Gainesville.

John Harris
Professor and Chair

COGNITION, CONTROL, COMPLEXITY

What do these words mean?



Renowned Scholar and
Researcher Dr. Sean Meyn
Joins Faculty

Dr. Sean Meyn has embarked on a quest to find answers to this question. Even without precise definitions, his lab, C³ – Cognition & Control in Complex Systems, seeks to interact across the University of Florida on problems related to control and cognition in complex systems.

Having grown up near the ocean in California, Dr. Sean Meyn longed to return to the nature of his youth. He chose Gainesville in part for its natural beauty. Two of his favorite

Gainesville places are Lake Alice on the campus of the University of Florida and the La Chua Trail located in the famous Payne's Prairie near Gainesville. Beyond beauty, he was drawn to the University of Florida by the opportunities in sustainable research and the opportunities to conduct "cross-disciplinary research on complex-systems."

Dr. Meyn's research and teaching interests lie in "information theory" and "control." For instance, if one were to ask a doctor who specializes in diabetes the meaning of the words "cognition, control, and complexity," he or she may answer that the pancreas has *cognition* of the presence of sugar in the blood; the pancreas in turn *controls* the release of insulin in a highly *complex system* – the human body – which then reacts to this release of insulin.

Dr. Meyn is creating C³ – **Laboratory for Cognition & Control in Complex Systems** - to focus on issues surrounding design and operations in complex systems, with applications ranging from data centers to neurobiology; smart buildings to adaptive sensor networks. According to Dr. Meyn, "to help engineering students understand that in order to create algorithms for learning and for control, you first have to understand the system you'd like to control, which requires enormous abstractions; it takes not only mathematical sophistication, but also requires 'play time'." Dr. Meyn believes that professors "need to make use of laboratories and computer simulations to make the value of abstractions more apparent."

Focus on Energy

Dr. Meyn has undertaken a survey to find the many research groups within the University of Florida with interest in control and inference in complex systems for various applications, for instance, increased research on renewable energy. An energy revolution similar to the telecommunications revolution of recent decades would bring exciting new industry and excitement to the entire nation. In the recent ARPA-E call for proposals, the main thrust is the urgent need for new energy infrastructure, and systems technology to make use of new technologies in the 20th century grid. The Department of Defense would invest in this research. It is clear today that infrastructure and in particular energy, is a significant security issue. Florida has been a leader in



these early days of the energy revolution, with energy centers such as FESC and FSEC. The challenges today are both technological and economic. Disruptions to the power grid today can create transfers of millions of dollars between consumers and suppliers; for instance, last year in New Zealand \$25 million dollars changed hands following a shortage of power lasting only six hours.

A major factor important in controlling the power grid is matching supply to demand. On the large scale, electrical energy cannot be stored; therefore, it must be generated as needed. A sophisticated control system is required to ensure electric generation very closely matches the demand. The transmission web provides such ability, but realizing when to change supply highlights the importance of cognition and modeling systems. Cognition systems allow utilities to monitor the demand of electricity to match power. Modeling greatly helps in predicting how much power will be needed, which can better prepare the generation plants because they know what to expect. Moving forward, the smart grid provides much improved cognition abilities (and potentially control too). Utilities can view customer usage in real-time, even by appliance (though only when properly equipped). In some cases, they can remotely control them too. For example, on a hot Gainesville afternoon,

"In order to create algorithms for learning and for control, you first have to understand the system you'd like to control, which requires enormous abstractions."

— Dr. Sean Meyn



One of Dr. Meyn's favorite spots in Gainesville, La Chua Trail in Payne's Prairie

clouds could reduce solar output to the grid. To compensate, the utilities could, for instance, cycle customers air conditioners, raise fridge temperature settings, and turn off large building HVAC fans. Traditionally, utilities would need to ramp up production (often with inefficient and expensive diesel generators) or face blackouts.

The types of energy sources are a form of control too.

As different sources are combined (solar, nuke, coal, oil, wind, hydro, geothermal and natural gas) there are more options for supplying power needed. The economics of each form dictate how power will be produced. To learn more about Dr. Meyn's research, visit the ECE website.

ECE Center for High-Performance Reconfigurable Computing (CHREC) awarded Alexander Schwarzkopf Prize for Technology Innovation

BY DONNA HESTERMAN

The National Science Foundation's Center for High-Performance Reconfigurable Computing, or CHREC, headquartered at the University of Florida, was recently awarded the 2012 Alexander Schwarzkopf Prize for Technology Innovation for its research and development of Novo-G, the world's most powerful reconfigurable supercomputer.

"It's the prototype for a whole new series of adaptive computing machines that industry leaders can build and develop for their own use," said Alan George, director of CHREC and professor of electrical and computer engineering at UF.

Awarded annually since 2005, the Schwarzkopf Prize recognizes excellence in National Science Foundation, or NSF, cooperative research centers such as CHREC charged with the mission of fostering collaborative research between industry and universities. Novo-G, the innovation that earned CHREC the prize for 2012, is much faster and more efficient than conventional supercomputers many times its size and cost and uses far less energy.

"When you're working with a conventional supercomputer, you have to write each application so that it plays to the fixed nature of the machine's processing architecture," George said. "Novo-G turns that around; the machine adapts to handle the problem."

When programmers write an application for Novo-G, they insert code that tells the machine's processors how best to arrange themselves to handle most efficiently the problem being proposed. And that leads to big savings in power, money and time over what a conventional computer can do, he said.



Dr. Herman Lam & Dr. Alan George with the Novo-G supercomputer.

Novo-G first came online in the summer of 2009 and has doubled its reconfigurable processing capacity annually since that time. The featured devices in Novo-G are Field-Programmable Gate Arrays or FPGAs, which enable the user to customize and configure the hardware.

The Alexander Schwarzkopf Prize isn't just about CHREC's technological achievements with Novo-G, George said. The award also recognizes its success in pushing the relationship between academic research and industry as an NSF center. CHREC is one of about 50 such centers in the U.S.

"This award says that CHREC is exemplary as a national research center making breakthroughs for industry, government and society at large," Herman Lam, associate director, said. "One of the best."

To find out more about CHREC visit its website: www.CHREC.org.

Dr. Greg Stitt National Science Foundation CAREER Award Recipient



Dr. Greg Stitt

DR. GREG STITT, assistant professor in electrical and computer engineering, was awarded a prestigious Faculty Early Career Development Award (CAREER) from the National Science Foundation for his research into **Design Virtualization for Mainstream Programming of Reconfigurable Computers**.

Dr. Stitt's project focuses on enabling mainstream application designers to take advantage of the significant performance and power advantages of reconfigurable computing devices.

The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of the early career-development activities of those teacher-scholars who most effectively integrate research and education within the context of the mission of their organization.

Dr. Stitt received his Ph.D. in Computer Science from the University of California, Riverside in 2007 and is now an assistant professor in the Electrical and Computer Engineering Department at the University of Florida. His research focuses on reconfigurable computing, embedded systems, design automation, and computer architecture, with over 40 publications and 2 patents in these areas. Dr. Stitt is also a faculty member of the NSF Center for High-Performance Reconfigurable Computing (CHREC).



Dr. Vladimir Rakov

DR. VLADIMIR RAKOV Delivers Keynote Presentation at ILDC / ILMC Conference
Dr. Vladimir A. Rakov made a keynote presentation "Applications of lightning detection network data for lightning research and protection" at the 2012 International Lightning Detection Conference/Lightning Meteorology Conference (ILDC/ILMC), Broomfield, Colorado, April 2-5, 2012. He also presented his lecture "Lightning parameters of engineering interest" at the 3rd Russian Conference on

Lightning Protection, St. Petersburg, Russia, May 22-23, 2012 wherein participants and the scientific committee members from the leading Russian power utilities met to study and discuss papers dedicated to the latest developments in the field of lightning protection. Dr. Rakov was recently elected a Fellow of the American Geophysical Union (AGU) "for his fundamental work on lightning modeling and identification of a number of basic lightning processes." AGU has more than 60,000 members from 148 countries. Only one in a thousand members is elected to Fellowship each year.

OTHER AWARDS AND HONORS:

The following ECE faculty members were honored by the following organizations between 2010 and 2012:

RESEARCH AWARDS

Alexander Schwarzkopf Prize Winner

Alan George, 2012
Herman Lam, 2012

American Geophysical Union's John Adam Fleming Medal

Vladimir Rakov, 2011

IEEE J. J. Ebers Award

Mark Law, 2010

IEEE Neural Network Pioneer Award

Jose Principe, 2011

International Conference on Lightning Protection Karl Berger Award

Martin Uman, 2010

NSF CAREER Awards

Greg Stitt, 2012
Ann Gordon-Ross, 2010
Xiaolin "Andy" Li, 2010

RECOGNITIONS

IEEE Fellow

Jenshan Lin, 2010

IEEE Communications Society Distinguished Lecturer

Yuguang "Michael" Fang, 2012-2013

IEEE UF Chapter Lifetime Achievement Award

Ramakant Srivastava, 2012

International Academy of Medical and Biological Engineering Fellow

Jose Principe, 2012

TEACHING & FACULTY AWARDS

Florida Blue Key/UF Homecoming Distinguished Faculty Award

Yuguang "Michael" Fang, 2011

IEEE-HKN UF Chapter ECE Teacher of the Year

Karl Gugel, 2012

Pramod P. Khargonekar Junior Faculty Award for Excellence

David Arnold, 2011

University of Florida Doctoral Dissertation Advisor/Mentoring Award

Yuguang 'Michael' Fang, 2010

University of Florida Faculty Enhancement Opportunity Award

Jenshan Lin, 2010

SCHOLAR AWARDS

NSFC Dragon Star Lecture Professorship

Tao Li, 2012

NSFC Oversea Scholar Collaboration Award

Tao Li, 2011

Outstanding Young Alumnus - Clemson University

John Shea, 2011

NEW FACES



XIAOLIN "ANDY" LI, ASSOCIATE PROFESSOR, PHD, RUTGERS UNIVERSITY, 2005

Dr. Li, director of the Scalable Software Systems Laboratory, comes to UF from Oklahoma State University. His research interests include Parallel and Distributed Systems (PDS), Cyber-Physical Systems (CPS), and network security & privacy. Dr. Li's S3Lab is dedicated to exploring innovative ideas/algorithms and design next generation software components toward scalable, self-managing, high-performance, and trustworthy parallel and distributed ecosystems. S3Lab is a member of the NSF Cloud and Autonomic Computing Center. In 2010, he was presented with the NSF CAREER Award.



NIMA MAGHARI, ASSISTANT PROFESSOR, PHD, OREGON STATE UNIVERSITY, 2010

Dr. Maghari comes to UF from Oregon State University. His main area of research is analog/mixed-signal IC design. Dr. Maghari is working on synthesizable ADCs and using time-assisted techniques for high-performance ADCs. Dr. Maghari expects his students to be creative in finding solutions to existing design challenges.



SEAN MEYN, PITTMAN EMINENT SCHOLAR CHAIR, PHD, MCGILL UNIVERSITY, 1987

Dr. Meyn joins the ECE department from a 23-year tenure at the University of Illinois, Urbana-Champaign where he served as Research Professor at the world-renowned Coordinated Science Laboratory and Director of the Decision and Control Laboratory. His interests include Markov processes (with or without control), spectral theory and

large deviations; Stochastic approximation, reinforcement learning and simulation; detection and inference; networked systems: control, visualization and performance; economics with applications to energy markets.



YONG-KYU "YK" YOON, ASSOCIATE PROFESSOR, PHD, GEORGIA INSTITUTE OF TECHNOLOGY, 2004

Dr. Yoon, director of the Interdisciplinary Microsystems Group, comes to the UF from the University of Buffalo. His research group focuses on advanced electromagnetic and photonic devices and systems. Dr. Yoon's Multidisciplinary nano and Microsystems (MnM) laboratory pursues research activities intersecting more than one traditional science and engineering discipline in nano and micro scale systems. He received the NSF (CAREER) Award and the Young Investigator Award from the University at Buffalo.



KATHIE RUSSELL, ADJUNCT ASSOCIATE PROFESSOR, MA, FLORIDA ATLANTIC UNIVERSITY, 2000

Professor Russell is the department writing specialist; she teaches Technical Writing to international students, which is designed to help improve writing skills, she also is the managing editor of the newsletter. Kathie spent 3 years in the Sultanate of Oman teaching ESL; she earned her ESL certification through Cambridge University.

Staff Spotlight

GRADUATE ADVISOR

Shannon Chillingworth

Dedicated to Excellence

Shannon Chillingworth, ECE graduate advisor, is proud to be a recipient of this year's College of Engineering Advisor of the Year Award for 2011-2012 in recognition of her excellence in advising graduate students.

Shannon regards her purpose in the university as one that frequently goes unnoticed: "When one considers the role that academic advisement plays at the university level, most assume that the group being targeted is undergraduate students. The prevailing view is that graduate students are more mature and do not need the same administrative and emotional support as undergraduate students. Few think of the important role that academic advisors play in helping graduate students progress toward attaining their goals and receiving graduate level degrees."

Since starting with the ECE department in May 2002, Shannon has had the pleasure of helping ECE graduate students achieve their academic goals. She has done so not only by helping them successfully navigate the different bureaucratic structures associated with graduate education at the University of Florida but also by lending them necessary emotional support along their journeys. Shannon feels fortunate to be in this position; "I have had the privilege of working with students to make appropriate academic accommodations to plan for such joyous occasions as a marriage or the birth of a child. I have also been available as students have dealt with devastating events such as the death of a faculty advisor, the loss of funding, divorce and custody disputes. Some



"Few think of the important role that academic advisors play in helping graduate students progress toward attaining their goals and receiving graduate level degrees."

— Shannon Chillingworth

of these events are life challenges that graduate students share with undergraduates, but others are unique to the graduate student experience. By providing support for both their academic and emotional needs, I help to empower our students to live up to not only their full academic potential, but also their full life potential."

Shannon Chillingworth is a University of Florida graduate, having received a Bachelor of Science with Honors in Psychology (May 2002) and a Master of Arts in Political Science (May 2011). Shannon is responsible for the advisement of over 600 ECE master's and doctoral students. Shannon is a member of The National Academic Advising Association (NACADA). Her hard work and dedication were recognized by the university community in 2006 when she received a Division 3- Administrative/ Professional Superior Accomplishment Award.

STUDENT NEWS



ECE Students, Faculty and Staff Honored At Annual IEEE-HKN Banquet

On April 15, 2012, in conjunction with the UF chapter of IEEE and Eta Kappa Nu (HKN) ECE celebrated the accomplishments of its students, faculty and staff.



IEEE Student Branch Win Exemplary Award

The UF IEEE Student Branch traveled to Orlando, FL March 16-18, 2012 for the annual regional conference and took home several awards. The UF IEEE branch tied with University of Technology, Jamaica for Exemplary Student Branch out of the 48 schools in the southeastern United States that attended the conference. The award recognizes student branches for outstanding programs and activities over the current academic year.

Machine Intelligence Laboratory (MIL) Teams Participate In The 9th Annual ION Robotic Lawnmower Competition



From May 31st through June 2nd two UF teams from the Machine Intelligence Laboratory (MIL) participated in the 9th Annual ION Robotic Lawnmower Competition in Beavercreek, Ohio.

AWARDS

Dr. Eric Schwartz

IEEE Advisor Appreciation Award

Dr. David Arnold

HKN Advisor Appreciation Award

Dr. Karl Gugel

IEEE-HKN Teacher of the Year Award

Dr. Ramakant Srivastava

IEEE Lifetime Achievement Award, in recognition of 25+ years of continued service to the ECE student body

Ray McClure

IEEE-HKN Staff Appreciation Award

IEEE Officers and Chairs

Student Leader Appreciation Awards

HAVE A PHOTO OR NEWS YOU WISH TO SHARE?

If so, please send photos and/or news via email to Kathie Russell, managing editor, at krussell@ece.ufl.edu or via mail at:

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ECE, IEEE and HKN Wish To Thank The Banquet Sponsors – Texas Instruments And Research In Motion



Left to right: Dr. John Harris, ECE chair joins Scott Morrison of Texas Instruments, Kelly McEachern, HKN chapter president, and Jeff Caldwell, outgoing IEEE chapter president at the IEEE/HKN Annual Banquet.

Congratulations to ...

UF IEEE student branch teams for placing 1st and 2nd in IEEEEXTREME 5.0 programming competition. The UF IEEE student branch hosted a 24 hour programming competition called IEEEEXtreme5.0. The competition took place October 21 with participants and proctors remaining in the New Engineering building for 24 hours. The UF IEEE student branch fielded 9 teams in a field of 1,515 teams worldwide. Two UF teams placed 1st and 2nd in the United States and 13th and 14th in the world. Other UF teams placed 38th, 43rd, 54th, 178th, 189th, 191st, and 331st worldwide.

Austin Brockmeier, Ph.D student under Dr. Jose Principe, for being selected for the East Asia and Pacific Summer Institutes (EAPSI). Funded by the NSF, the fellowship is to conduct a research project entitled “Signal processing techniques to separate and analyze brainwaves” during the summer of 2012 at the Brain Science Institute RIKEN in Wako-shi, Saitama, Japan.

Students Receive Prestigious Electric E Award



Electric E Award recipients Everett Salley, Matthew Morgan, and Sydney Greene with ECE Chair, John Harris.

Congratulations to The Electric E Award recipients Sydney Greene, Aleksandras Kaknevicus, Kelly McEachern, Matthew Morgan, Everett Salley and Navid Shahrestani. The Electric E Award is given to students with a minimum upper division 3.90 GPA and a minimum 3.90 GPA in all electrical engineering courses.

SPRING 2012 GRADUATION

The Department of Electrical and Computer Engineering wishes to extend congratulations to all the ECE graduates for Spring 2012. Special accolades go out to the following ECE Ph.D. graduates.

- ▶ Jyotsna Chauhan
- ▶ Xin Guan, AMD Design Engineer
- ▶ Erion Hasanbelliu
- ▶ Yakun Hu, Bloomberg L.P.
- ▶ Kyungwoo Kim
- ▶ Carolyn Rose Krekeler
- ▶ Choong Heon Lee
- ▶ Christopher David Meyer
- ▶ Arslan Munir, Rice University, Post-Doc. Research Associate
- ▶ Hemant Palakodety Rao
- ▶ Manu Rastogi, Qualcomm, Sr. Engineer
- ▶ Marisha Jan Rawlins
- ▶ Nicole Lisa Rowsey, Intel Corporation
- ▶ Alexander Singh Alvarado, Hewlett-Packard
- ▶ Jingjing Sun
- ▶ Duc Vu, U.S. Navy
- ▶ Ning Wang
- ▶ Yan Yan
- ▶ Wenxing Ye

ALUMNI

Chris Malachowsky Receives UF Distinguished Alumnus Award



Engineering College Dean Cammy Abernathy presents Chris Malachowsky with the Distinguished Alumnus Award.

“Creativity, Leadership, Integrity, Professional Excellence, and Service to the Global Community” are the attributes given by College of Engineering Dean Cammy Abernathy to UF Distinguished Alumnus Chris Malachowsky. In his congratulatory letter to Mr. Malachowsky, UF President Bernie Machen recognizes “the honor and prestige you brought to your alma mater through your accomplishments and services that we honor you.” With these accolades, Chris is a deserving recipient of the Distinguished Alumnus Award, which is given to an alumnus who has both “excelled in his or her chosen field and has performed outstanding service for the university.”

Chris has certainly done both. He earned a B.S. in electrical engineering from UF and an M.S. in computer science from Santa Clara University. At age 34, Chris co-founded NVIDIA Corporation, and through his outstanding and distinguished career, he stands to serve as a role model for generations of Gators to come.

A recognized authority on IC design and methodology, Chris has been instrumental in managing, defining and driving NVIDIA's core technologies as it has grown from a start-up to a Fortune 1000 company (and the *Forbes*

2007 Company of the Year) with a worldwide reputation for engineering and execution excellence. He previously held engineering and technical leadership positions at HP and Sun Microsystems. Chris has authored close to 40 patents, most of which relate to graphics.

Much of NVIDIA's success stems from the ethical leadership of its founders. Chris sums up his leadership philosophy: “We feel responsible to our families, employees, and shareholders to not be a fly-by-night operation, and instead to build a company that gives us all a sense of pride and delivers lasting value. As it's not our style to let anyone one-up us in the marketplace, it's also not our style to be victims of our own success within the company. The ingenuity and creativity required to keep our products flying off the shelves does not allow us to sit back on any accomplishments or to do anything that isn't straightforward and honest.” Chris' co-founder of NVIDIA, Jen-Hsun Huang, extols Chris for his respect for fellow workers “whether they're on our board or working in the lunchroom,” and calls him “committed to making a contribution to the world.”

In addition to his many career accomplishments, Chris is dedicated to serving his community with organizations such as the Alzheimer's Association, the AOPA Air Safety Foundation, the Community Foundation and United Way of Silicon Valley, the National Multiple Sclerosis Society, and the Mycosis Fungiodes Foundation. In 2007, Chris helped raise a record \$7.5 million for Second Harvest Food Bank of Santa Clara and San Mateo Counties, which brought in 1.5 million pounds of non-perishable food. Through the Wounded Warrior Project, he uses his private plane to transport severely injured soldiers to medical treatment as they transition to post-military life.

According to John Harris, ECE Chair, “Chris Malachowsky embodies the true sense of a Gator Engineer with an entrepreneurial spirit, a drive for results, and all of the qualities of a leader.”

Outstanding Young Alumnus Recipient Jason Grzywna

Jason Grzywna is vice president of engineering of Prioria Robotics, Inc. Grzywna received a bachelor's and master's degree in electrical and computer engineering from UF. He has more than a decade of experience in the area of electrical engineering, specifically in unmanned systems and robotics. Grzywna has had great success supporting highly technical and international sales, strategic partnership creation and management, raising capital, investor relations and strategic operational plans.

"Jason is not only an outstanding engineer, but he has charisma and a passion that makes people want to work with him."

— Dr. Eric Schwartz

Prior to his time at Prioria, Jason worked as a researcher at UF developing small-scale flight avionics and vision-based algorithms for autonomous flight and intelligent micro-air vehicle missions, including flight in complex urban environments and ground object tracking.

In his spare time, Jason enjoys reading, mountain biking, gaming on his PS3, idolizing Apple culture, traveling, and cooking.

Dr. Eric Schwartz, ECE professor and associate director of the Machine Intelligence Laboratory at UF, extols Jason as a "leader in MIL in the early 2000's. He was part of our submarine robot team for two years, heading up the group in 2002, and was a key member of our MAV (Micro Air Vehicle) research area. His success at Prioria Robotics is greatly deserved and a credit to ECE and Gator engineering."



Dr. John Harris, ECE Chair, Jason Grzywna, and Dr. Eric Schwartz

IN MEMORIAM

Pedro Rustan (Ph.D. '79) Died June 28, 2012. Rustan fled Cuba when he was 20; he became an Air Force colonel and worked for the CIA & NASA among other governmental agencies. The Air Force sent him to graduate school at UF where he earned his Ph.D. in electrical engineering in 1979. His Ph.D. research focused on the effect of lightning strikes on airplanes. After his work at UF, Dr. Rustan led an Air Force program to prevent planes from being damaged from lightning strikes. ECE inducted him in the 2009 inaugural class of the ECE Academy.

Dr. Bert Daniel Nelin passed away on July 4, 2012. Dr. Nelin was a visiting professor in ECE in the late 1990's. He was educated at Chalmers University of Technology in Gothenburg, Sweden earning a Ph.D. in electrical engineering in 1959. During his time teaching at ECE, he taught in the communication and circuits areas and brought practical experience to the classroom. He was an amateur radio operator and often attended the senior IEEE pizza parties that were held at the end of each semester where the students were the honored guests. Those who wish to remember Dr. Nelin are encouraged to make gifts in his name to the Gainesville Amateur Radio Society.

ALUMNI

College of Engineering Innovation Summit and Reunion Highlights



Dean Cammy Abernathy, Gator Engineering Innovation Award Recipients Chris Malachowsky and Augi Lye, and Erik Sander, Director of Engineering Innovation.

Leaders from academia, government, industry, technology and entrepreneurship gathered at UF in September 2011 to discuss the vital role that engineering has played in creating innovation centers.

In addition to the

panels, a Gator Engineering Innovation Awards were presented to ECE alumni Chris Malachowsky (BSEE '80) and Augi Lye (BSCEN '03, BSEE '05).

College of Engineering 2011 Grand Guard Reunite in Celebration



ECE Chair Dr. John Harris stands with three EE alumni at the College of Engineering Grand Guard Luncheon. In the back from left to right are: Robert Kemerait (BEE '60 ME '66 Ph.D. '71), Harlan Harrell (BEE '61), and Troy Branning (BEE '61). In the front row are their spouses: Janet Perkins Kemerait, Carole Harrell, and Cynthia Branning.

ECE Chair Tours USA To Meet With Alumni



Chair John Harris and Development Officer Erin Hodge and a few ECE alumni employed at Google

Representatives from the Department of Electrical and Computer Engineering and the College of Engineering are traveling the country with the goal of improving alumni relations, instituting online training courses, furthering college recruiting, and starting new research collaborations. In October 2011, Dr. John Harris, Department Chair and Associate Chair Dr. Rob Fox traveled to Dallas, Texas to meet with ECE alumni at Texas Instruments. On June 24, 2012, Dr. Harris and Development Officer Erin Hodge traveled to Mountain View, California to meet with ECE alumni employed at Google.

Stakeholder's Weekend



Stakeholders Weekend, held in February 2012, recognized the key role that private fundraising plays in the success of the University of Florida. Pictured are Dr. Toshi Nishida, ECE associate chair, standing with Mrs. Katherine Milikin and recipients of the Bucket Milikin (BEE'58) Electrical Engineering Scholarship for 2011-2012 – ECE students Michael Warkander and Nakisha Gray.

Alumni – Donor Highlights

The generosity of ECE's alumni and friends makes a significant difference in the department's quest to keep its education and research programs among the best in the world. The value of our graduates' degrees increases as our department continues its excellence.

Notable Recent ECE Contributions

Innovator Charles Poekel, Sr. Endows Scholarship to ECE Undergraduates

In 1938, Charles Poekel, Sr., then a UF electrical engineering graduate student, was looking for a thesis topic. At the same time, Assistant Athletic Director, Percy Beard was looking for a way to light Florida field so athletes could practice at night. With the guidance of engineering Dean Joseph Weil, Poekel's thesis "Design of Flood-lighting For Football Stadia" brought the lights to the field. Upon earning his master's degree with honors, Poekel embarked on his life with wife Alice and a career as an engineer. In 2010, UF honored Poekel as Alumnus of the Year.

This spring, 96-year-old Poekel made a generous contribution to establish the Charles A. Poekel, Sr. Endowed

Scholarship Fund in Electrical and Computer Engineering. Even though tuition was only \$150 a semester, he distinctly remembers several classmates who had to leave UF because they did not have the financial means to continue. It is his hope that future generations of hardworking students who have dreams of completing their undergraduate education and/or pursuing a graduate degree will now be able to do so.

For more information regarding how you can create a lasting legacy within the department, please contact Erin Hodge, Director of Development at 352-392-6795.



UPCOMING EVENTS

Grand Guard 2012

THURSDAY – SATURDAY, OCTOBER 11-13 Class of 1962. Grand Guard recognizes the 50th anniversary of one's graduation from UF. The weekend includes a welcome reception, breakfast of memories, class seminar, lunch with representatives from different colleges, induction dinner and dance and finally, an exclusive tailgate and viewing party for our Grand Guard inductees and guests.

Engineering Leadership & Reunion Weekend 2012

FRIDAY, OCTOBER 19 The University of Florida Engineering Leadership Institute presents a day-long summit with Gator Engineering alumni and global companies discussing the active roles they take in leadership. Alumni and friends are encouraged to attend and interact with students, faculty and panelists.

SATURDAY, OCTOBER 20 Join fellow Gator Engineering alumni and friends on the North Lawn of the Reitz Union for a tailgate party prior to the UF vs. South Carolina football game.

Homecoming Events 2012

FRIDAY, NOVEMBER 9, 5 PM The Florida Blue Key Alumni Reunion is held at the President's house.

FRIDAY, NOVEMBER 9, 7 PM Gator Growl, hosted by Florida Blue Key, in the Swamp.

SATURDAY, NOVEMBER 10 Florida Alumni Barbeque held 2 ½ hours before kickoff.

SATURDAY, NOVEMBER 10 Homecoming Football Game.

For more information about alumni events visit www.ufalumni.ufl.edu



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providing research opportunities and participation in student chapter activities will help us make the difference between being good and being the best. Your annual gifts to the Department can provide the financial boost to allow our graduates to compete successfully in today's world and to contribute to society.

Enclosed is my gift of \$_____ for the
ECE Unrestricted Fund (001811)

Should you wish to make a restricted gift of \$2,000 or more for a
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We strive to offer our students in electrical and computer engineering the best possible educational and research opportunities. We believe a strong faculty and a focus on cutting-edge programs are the best components of these opportunities. Being able to offer more scholarships to outstanding students,

PLEASE SEND CHECK AND FORM TO:

Dr. John Harris, Chair
Department of Electrical and Computer Engineering
c/o Norm Green
PO Box 116200
Gainesville, FL 32611-6200

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