Chair’s Corner  Dr. Guru Subramanyam

Congratulations to the Class of 2016 graduates! We had an outstanding class of 2016 graduates with over 40 electrical and computer engineering majors graduating in May 2016. We had a record number of 10 doctoral students graduating from our department! Our graduates had excellent job offers and graduate school admissions.

I am also pleased that many of our outstanding undergraduates are continuing with us for the Bachelor’s Plus Master’s (bpm) program now being offered in the department. The master’s in computer engineering program (CPE) completed its first year and already graduated its first student!

The program is proving to be popular as applications for the master’s in computer engineering are growing quite rapidly.

The 2015–16 academic year has been a productive year for the department. We had two faculty searches conducted in the year, one in computer engineering and the other for the GE EPICenter professor position. The computer engineering faculty search resulted in successful hiring of Dr. Feng Ye, an expert in wireless networks and network security. He joins us in the Fall of 2016. The GE EPICenter position is in its final stages of hiring. We hope to reveal a world-class faculty member in the Fall of 2016 for this position. The GE EPICenter professor will work closely with the GE EPICenter and develop a research agenda in aerospace power systems and power electronics.

Congratulations to Dr. Keigo Hirakawa, who has been tenured and promoted to the rank of associate professor, effective August 16, 2016. On a sad note, we lost a colleague, a friend, a mentor, and a member of our industrial advisory committee, Mr. Larrell Walters in May 2016, due to a heart attack. Larrell will be remembered for all his contributions to the department over the past 10+ years. His major contribution is in establishing the Institute for Development and Commercialization of Advanced Sensor Technologies (IDCAST), which has become the signature program funded through the Ohio Third Frontier program. IDCAST has resulted in over 300+ new jobs in the state, and more than $300 million in economic impact in Ohio. Please enjoy the articles on our department’s new activities in this letter.
ECE Alumni Dr. Mark Moronell ‘83, Physician and Entrepreneur

The University of Dayton Magazine, Spring 2016 issue, contains an article about Electrical Engineering Graduate, Dr. Mark Moronell ‘83. Dr. Moronell “holds board certification in internal medicine, cardiovascular disease and nuclear cardiology.” He wrote a book, entitled Succeeding in Healthcare Sales, which was released in January of 2013. “He is the founder of Health Comm Strategies, a specialty consulting firm that assists companies, like hospitals, operate more efficiently within the health care sector.” Dr. Moronell has joined our ECE Industrial Advisory committee.

ECE 499: Contemporary Digital Systems at the UD China Institute

Prior to the start of the Spring 2016 semester, nine ECE students embarked on a two week, intensive educational experience in China, visiting the cities of Beijing, Shanghai, and Suzhou. During those two weeks, students enrolled in a three credit hour course entitled “Contemporary Digital Systems” that counted toward their electrical or computer engineering degree program. In the class, students learned modern day digital systems’ design and the use of many advanced digital design tools such as Altera’s synthesis tool, Quartus, as well as Mentor Graphic’s simulation tool, Modelsim. By the end of the class, students were able to complete many digital designs, verify correct functionality of their designs with Modelsim, synthesize their designs onto programmable logic devices, and operate those designs in real-time!

Additionally, the class was able to tour three industrial facilities in Suzhou, namely Higer Bus, Black & Decker tools, and Marian Die Cutting Facility, where students were able to see first-hand the effects of engineering on industry. During the trip, students were also able to see some of the amazing sites of China such as the Great Wall, Emperor’s Summer Palace, and the Shanghai Tower.
Seyed Ataollah Raziei Awarded the 2016 Krishna M. Pasala Ph.D. Memorial Scholarship

The Institute of Electrical and Electronics Engineers (IEEE) Dayton Section is pleased to announce the 2016 award of the Krishna M. Pasala, Ph.D. Memorial Scholarship to Seyed Ataollah Raziei. The subject memorial scholarship is awarded annually to a graduate student attending the University of Dayton within the Department of Electrical and Computer Engineering. The scholarship award is based on academic excellence in the area of electrical engineering and includes a prize of up to $1,000. We congratulate Seyed on the winning of this award on behalf of the IEEE Dayton Section and the IEEE Foundation. He was presented his award at the IEEE Dayton Banquet on April 30, 2016.

UD’s Vision Lab Work Featured on WVXU Radio!

California-based Pacific Gas & Electric has given UD’s Vision Lab $254,362...

On Monday, March 21 Ann Thompson, reporter and mid-day host for WVXU radio, gave UD a shout out for their research in computer software that helps in detecting oil and gas pipeline threats. She said, “California-based Pacific Gas & Electric has given UD’s Vision Lab $254,362 to help researchers continue to create an automated monitoring system for building change detection on pipeline corridors by processing and transmitting images in virtual real time.”

Webinar on MEMS Research

Dr. Vamsy Chodavarapu gave a webinar on February 23, 2016, offered by CMC Microsystems, a provider of Coventor’s micro-electrical-mechanical (MEMS) design solutions. The webinar was entitled Leveraging MEMS Prototyping Platforms for Research and Commercialization and focused on reviewing the development of many MEMS devices, using the MIDISTM fabrication process. There was also a discussion on micro electrostatic actuators being fabricated using the Micralyne MicraGEM-SiTM.
Undergraduate Student Devin Spatz Receives the University Innovation Fellowship Award

Devin Spatz, a senior in electrical engineering, was nominated by the Department of Electrical and Computer Engineering to be a candidate for the prestigious University Innovation Fellows (UIF) program. After a rigorous application process and an eight-week training program, he was recognized as an official Fellow—one of the only 607 in the United States from more than 140 universities. Stanford’s Epicenter and VentureWell administrated the UIF program, with financial support from the National Science Foundation and the Kern Entrepreneurial Engineering Network (KEEN). Devin was part of a KEEN leadership circle of five UD engineering students. Following the UIF training, Devin traveled to the UIF Meet Up in Silicon Valley where he and 300 other students participated in an intensive, three-day series of workshops at Stanford’s Design School, Google and Microsoft.

Congratulations Devin!
A Meeting With The Ruler of Dubai

Dr. Vijayan Asair had a unique opportunity to visit His Royal Highness Sheikh Mohammed bin Rashid Al Maktoum, the ruler of Dubai and vice president of the United Arab Emirates at his palace while he was in Dubai during the week of April 18. Dr. Asari was participating in a conference when Dr. Issa Salim, head of the Bioresonance Clinic at Rashid Hospital took the initiative for this meeting. The pair has discussed a long-term vision about initiating a research collaboration for the development of brain wave based bio-medical diagnosis and treatment systems.

UDRI Exceptional Performance Awards

In the March/April 2016 UDRI Research Leader publication, a number of professional researchers earned Exceptional Performance Awards in 2016. The award recognizes and rewards exceptional performance that results in sustained organizational growth; significant sponsorship from new or existing customers or in new technology areas; and enhancement of UDRI’s reputation. Among these winning researchers were ECE adjunct faculty members Jitendra Kumar, Paul Kladitis, Nilesh Powar, and Bang-Hung Tsao.


Mani, Nilan; S. Kim, Steve; Annam, Kaushik; Bane, Danielle; Subramanyam, Guru “Creation of carbon nanotube based biosensors through dielectrophoretic assembly,” Proceedings of SPIE—the International Society for Optical Engineering, v 9557, 2015, Nanobiosystems: Processing, Characterization, and Applications VIII

Kumar, Jitendra; Ouchen, Fahima; Smarra, Devin A.; Subramanyam, Guru; Grote, James G. “DNA based electrolyte/separator for lithium battery application” Proceedings of SPIE—the International Society for Optical Engineering, v 9557, 2015, Nanobiosystems: Processing, Characterization, and Applications VIII


Miniaturized and reconfigurable CPW square-ring slot antenna including ferroelectric BST varactors Jiang, Hai; Subramanyam, Guru Assignee: University of Dayton Publication Number: US8957817 Publication date: 02/17/2015 Kind: Patent


Awards and Achievements

FACULTY AND STAFF

The Department of the Air Force Award for Exemplary Service, 2015 was awarded to
**Dr. John Malas**

The Department of the Air Force Outstanding Civilian Career Service Award, 2015 was awarded to
**Dr. John Malas**

The Department of the Air Force Special Act Award, 2015 was awarded to
**Dr. John Malas**

The Sigma Xi George B. Noland Award for Outstanding Research was awarded to
**Dr. Vijayan Asari**

**Dr. Keigo Hirakawa**
was promoted to Associate Professor with tenure

**Dr. Eunsung Shin,**
joined the department as a senior research scientist in January 2016. Previously, he was in UDRI as a research scientist in the Energy Systems Division.

STUDENTS

The Anthony Horvath, ’22 and Elmer Steger, ’22 Award of Excellence to the Outstanding Senior in Electrical Engineering was awarded to
**Andrew D. Bolubasz**

The Brother Louis H. Rose, S.M., ’33 Award of Excellence to the Outstanding Junior in Electrical Engineering was awarded to
**Kevin R. McElroy**

The Electrical and Computer Engineering Graduate Student Showcase Award was awarded to
**Matthew Sprague**

The Thomas R. Armstrong, ’38 Award of Excellence for Outstanding Electrical Engineering Achievement in Memory of Brother Ulrich Rappel, S.M. and E. Frank Armstrong was awarded to
**Devin A. Smarra**

The Mary C. Millett Endowment Award for the Outstanding Senior Electrical and Computer Engineering Student in memory of Mary C. Millette was awarded to
**Emma L. Romstadt**

**Congratulations to all the award winners!**
May 2016

Graduates

BACHELOR’S DEGREES AWARDED

Kyle Pete Abel
Yousuf Abdulrahman Al-Ghazal
Saeed Fahad Alquraishi
Saud W A A M Alrumaith
Abdullah Abdulraheem Alshemali
Andrew David Bolubasz
Kaihmeelah Wallesha Bonham
Andrew D. Braun
Cory James Bucksar
Jeffrey Scott Cripe
Victoria Lynn Dicillo
Pu Gao
Henry Michael Garrett
David James Geck

Tyler J. Hart
Farah Helal
Qi Huang
Emma Catherine McClory
Conrad Richard Merling
Jumana Abdulhameed Moqaddam
Brian J. Mormon
Benjamin Edward Natarian
Jacqueline Ashley Nolan
John P. Overly
Erin L. Patterson
Matthew Allyn Pierce
Anthony Joseph Reiling
Kevin Christopher Rodenbeck Jr.

Emma Leigh Romstadt
Edward Clark Ruff III
Garrett Craig Sargent
Devin Alexander Smarra
Devin William Spatz
Kathryn Marie Steller
Tyler C. Tamburlin
Zachary E. Tencza
Craig Patrick Timms
Kevin M. Waldron
Dana Suzanne Walsh
Xiaoyan Zhang
Shuyue Zhang

MASTER’S DEGREES AWARDED

Saad Hussain Alshahrani
Prathusha Bodhanker
Alexander James Boytim
David Eugene Brendel
Kelly Anne Cashion
Yi Te Chu
Motaz Deebes

Pranathi Gona
Sagarika Gunjari
Chethan Kanth Jalli
Bhanu Raghavendra Kollimalla
Akash Kota
Naga Sai Babu Kongara
Kang Li

Mohammed Imran Ahmed
Jonathan D. Power
Prashanth Ramagiri
Manoj Kumar Sharma
Andrew David Thompson
Sai Lakshmi Vasireddy
Bin Zhang

DOCTORATE DEGREES AWARDED

Hamdi Abdelbagi
Tarig Abobaker Algadey
Tanvir Atahary
Joseph C. French

Md Raqibul Hasan
Patrick C. Hytla
Abdulmajid Abdussalam Mrebit
Ali H. Nassib

Shu Wang
Zhenyu Yang
Announcing the ECE Centennial Book

It is with great pleasure that we announce the completion of the book 100 Years of Excellence in Engineering Education and Research: Electrical and Computer Engineering. The book highlights the humble beginnings of the electrical engineering department at UD in 1911. It chronicles the growth of the department and the people that were instrumental in making this program what it is today. The book is available to all our alumni, parents, students and friends for $25 each. To place an order for your copy please fill out the order form below.

Name: ____________________________________________________ Date: __________________________  
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Dayton, OH 45469-0232  

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nstriebich1@udayton.edu