School of Electrical Engineering and Computer Science



Computer science and engineering professor receives \$3.5M NSF grant

Mahmut Kandemir will use the grant to improve Galaxy, a widely used scientific workflow management system. >>

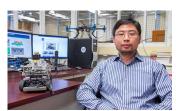
HEAD

Fall 2019

FEATURES

Electrical engineering professor receives NSF CAREER Award

The increasing development and use of cyber-physical systems, such as the smart grid, smart buildings, mobile robots and medical device



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networks, has led to a heightened need for improved measures to protect data privacy. Minghui Zhu, associate professor of electrical engineering, has been awarded a five-year, \$500,000 NSF CAREER Award to develop solutions that promote privacy while allowing cyber-physical systems to successfully accomplish control tasks. >>

Five new faculty members join the School of EECS



Five new faculty members joined the Penn State School of Electrical Engineering and Computer Science (EECS) this fall: Daniel Cullina, assistant professor of electrical engineering; Arzoo

Katiyar, assistant professor of computer science and engineering; Morteza Kayyalha, assistant professor of electrical engineering; David Koslicki, associate professor in the Department of Computer Science and Engineering, the Department of Biology and the Huck Institutes of Life Sciences; and Yan Li, assistant professor of electrical engineering. >>

School of EECS hosted engineering summer camps for girls

Building on last year's success, the School of Electrical Engineering and Computer Science hosted two week-long summer camps designed to introduce girls to engineering.

The Anything is Possible for Girls in Electrical Engineering (APOGEE) camp focused on wearable technologies. Students in this camp learned about the electronics and signals that surround us every day, interacted and worked with female electrical engineers and students and were introduced to the hands-on, Do-It-Yourself culture by actually building and creating. \geq

The Dancing with Robots Computer Science and Engineering camp focused on big data, big ideas and big computational technology. Students in this camp learned about artificial intelligence, machine learning and smart sensing, especially in computer vision and robotics. >>

Huang wins Johnson & Johnson Women in STEM2D Scholars Award

Shengxi Huang, assistant professor of electrical engineering, recently was named a winner of the Johnson & Johnson Women in STEM2D (WiSTEM2D) Scholars Award. She will receive \$150,000 in funding

and three years of mentorship from Johnson & Johnson toward her research on ubiquitous biosensing platforms. >>

New photonic liquid crystals could lead to next-generation displays

A new technique to change the structure of liquid crystals could lead to the development of fast-responding liquid crystals suitable for next generation displays and advanced photonic applications such as

mirrorless lasers, bio-sensors and fast/slow light generation, according to an international team of researchers from Penn State, the Air Force Research Laboratory and the National Sun Yat-sen University, Taiwan. >>

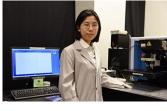
Professor leads national workshop, authors cybersecurity report for White House

Patrick McDaniel, the William L. Weiss Chair in Information and Communications Technology in the Penn State College of

Engineering, was selected by the National Science and Technology Council in coordination with the Executive Office of the President of the United States to lead a technical workshop on June 4-6 with experts from across the nation on cybersecurity. Recently, he co-authored a report that summarizes the discussions of the workshop, which was presented to several government research agencies and subcommittees and will be widely shared with policymakers. >>







Engineering professor awarded \$1.1M grant to increase efficiency of organic LEDs

Chris Giebink, associate professor of electrical engineering at Penn State, has been awarded a two-year, \$1.1 million grant from the U.S. Department of Energy for his research in organic light-emitting diodes (OLEDs).

The research, which is being conducted in conjunction with Michael Hickner, professor of materials science and engineering, chemical engineering, and chemistry, is focused on increasing the efficiency of OLEDs used for room lighting. >>

Computer engineering student overcomes odds to succeed after emigrating from **Mexico**

Gabriela "Gabby" Gonzalez Magana, a Penn State senior majoring in computer engineering with a concentration in robotics, has traveled a long and winding road; today, she serves as a mentor for girls studying STEM related subjects. >>

Penn State takes first, second place in international image dehazing challenge

A team of Penn State graduate students, led by Vishal Monga, associate professor of electrical engineering, won first place in a worldwide image dehazing challenge, with another Penn State team placing second in the competition. >>

Electrical engineering alumnus named **Woodrow Wilson Teaching Fellow**

When an unexpected change in jobs gave Kwesi Vincent, a 1999 Penn State graduate in electrical engineering, a chance to help students from underserved areas meet college math requirements, he quickly realized that he had a gift for teaching.

His engineering background combined with his passion for educating made him a natural pick for the first cohort of the Woodrow Wilson Teaching Fellowship program.

When theory meets application: Using machine learning techniques for geothermal exploration

When Jing Yang, assistant professor of electrical engineering, began looking for practical applications to her machine learning research, partnering with Chris Marone, professor of geosciences, for his work on safe and efficient geothermal exploration and energy production was a perfect fit.

Yang and Marone were awarded a 2019 Penn State Multidisciplinary Seed Grant for their collaborative research "Machine learning approaches for safe geothermal exploration." >>











From teacher to engineer and back again: Electrical engineering graduate student receives University-wide teaching award



When Philip Graybill received his degree in music education in 2005, he never could have predicted that his career path would lead him to

a doctorate in engineering. But 14 years later, as a doctoral candidate in Penn State's electrical engineering department, Graybill has found a new application for his education background, as his passion for and experience in teaching have led him to receive the 2019 Harold F. Martin Graduate Assistant Outstanding Teaching Award.

RECOGNITIONS & AWARDS

- Electrical engineering professor named to Roell Early Career Professorship >>
- Record-setting regional finish leads to spot in national cyber competition >>
- Lockheed Martin Space engineer receives Early Career Alumni Award >>
- Electrical engineering professor named Invent Penn State's 2019 Inventor of the Year >>
- Nanoporous Antireflection Coatings secures \$75,000 in tech tournament >>
- Five Penn State researchers awarded grants by Kaufman Foundation
- Former faculty member and spouse commit \$4M to electrical engineering >>
- Electrical engineering professor wins distinguished educator award >>
- Computer science sophomore represents Penn State at innovation challenge in Isreal \geq
- Electrical engineering student receives Erickson Discovery Award
- Assistant professor receives Outstanding Young Author Award >>
- Computer science and engineering graduate wins award for doctoral dissertation >>
- School of Electrical Engineering and Computer Science names first professorship
- Werner receives ACES Computational Electromagnetics Award >>
- Penn State is a Google AI Impact Grantee >>
- Zhang wins Humboldt Research Award >>

In the News

Our students, alumni, faculty, and staff

UPCOMING EVENTS

Dec. 21 College of Engineering Fall 2019 Commencement >>



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