From the Chair

The Ohio State University
2016 Annual Report

2015

Annual Report

Ohio State ECE

Points of Pride

$201
million

One State ECE Department

8
departments

3
research centers

52
members

19
positions being recruited in academic

Degrees conferred

42
PhD

715
Masters

270
Bachelors

Graduate students

116
masters

213
bachelors

Undergraduate students

358
pre-majors

520
declared majors

368
students

878
school

2015

ECE graduate program acceptance rates are less than

percentile GRE quantitative scores.

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percentile GRE quantitative scores.

Graduate enrollment

2014

2013

2012

2011

2010

Average GRE (quantitative)

Graduate Admitted

95 (20.1%) 215 (17.4%)

New Applicants

471 1236

Number Enrolled

36 146

IEEE Fellows

members who are

Number of faculty

Tenure-track faculty

10,844

Research-track faculty

5283

Clinical-track faculty

19

Graduate degrees conferred

PhD MS

230 276

165

165

2015-16.

positions being recruited in academic

supporting multiple new ECE faculty

program (discovery.osu.edu) that is

university's "Discovery Themes"

are being expanded through the

other universities. These collaborations

involves collaborations throughout

research is highly multidisciplinary and

of Prof. Yuejie Chi

and the ONR Young Investigator and

CAREER award of Prof.

Lori Dalton

, to IEEE Fellow status, the NSF

Chi-Chih Fernando Teixeira

and Profs.

past year, including the elevation of

leaders and have received multiple

Our faculty are international

areas, are currently in progress as well.

electrical and computer engineering

projects, across a wide spectrum of

Transportation. More than 100 other

Health Care Sensing and Intelligent

Pluto, as well as projects in Mobile

NASA's New Horizons mission to

the department's contribution to

international levels. Selected projects

a major impact at the national and

Our research has continued to have

scratches the surface of all the great

and alumni. The news reported just

from the work of our faculty, students,

spirit throughout this annual report,

You'll find evidence of our innovative

Education, research, and innovation,

From the Chair

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ECE

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DEPARTMENT OF ELECTRICAL

& COMPUTER ENGINEERING

Lead

Research

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ECE Program Tops in Ohio State Outreach

Ohio State's Electrical and Computer Engineering Department has been ranked first in the nation in its industry outreach efforts for several years. Faculty members, students, and alumni make critical contributions to the world of engineering.

SMAP launches

The NASA Soil Moisture Active Passive (SMAP) mission was launched in January 2015 to provide new global observations of soil moisture and frozen soil thickness. The SMAP mission is led by NASA's Goddard Space Flight Center. The spacecraft includes two instruments: the Microwave Radiometer (MWR) and the Active Passive Microwave Radiometer (AMP) observe soil moisture. The Microwave Imager (MI) and the CryoSat-2 mission are also participating.

New Horizons journey to Pluto

On July 14, 2015, New Horizons spacecraft traveled 3 billion miles from Earth to approach Pluto and its moons. As the spacecraft passed through the Pluto Kuiper Belt, scientists have collected data on Pluto's composition, atmosphere, and geological features. The mission will continue to explore the Kuiper Belt, one of the most remote regions of our solar system.

Harvesting energy

Researchers from the University of Michigan and the University of California, Berkeley, have developed a new solar harvesting platform that can convert sunlight into electrical energy. The device is made of carbon nanotubes and is capable of generating electricity even in low light conditions. The technology has potential applications in energy storage and renewable energy systems.

Ringle named 2015 Engineering Education & Practice Award Winner

Robert Ringle, associate professor of mechanical engineering, has been named the 2015 Engineering Education & Practice Award winner by the American Society of Engineering Education (ASEE). The award recognizes Ringle's contributions to engineering education and practice.

Fellow elections

IEEE has announced the election of 106 new Fellows, including several from Ohio State University. The Fellows are recognized for their significant contributions to engineering and technology.

EcoCar 3, Year One winner

Evergreen Energy, Inc., has won the Year One award in the EcoCar 3 competition. The competition is sponsored by the U.S. Department of Energy (DOE) to encourage the development of advanced technologies for electric vehicles. The team's vehicle features an electric motor, lithium-ion battery pack, and a system for regenerative braking.

Ertin advises presidential group

Professor Ertin Ertin, chair of the Electrical and Computer Engineering Department, has been appointed to the White House's Presidential Innovation Fellowship Program. The fellowship aims to bring the best of the private sector to the government to solve complex problems.

Safety at intersections

Researchers from Ohio State University have developed a new algorithm to improve safety at intersections. The algorithm uses data from in-vehicle and roadside sensors to predict the behavior of drivers and pedestrians. The goal is to reduce the number of accidents at intersections.

When the lights go out

During the summer of 2015, a widespread power outage affected the Northeastern United States, leaving millions of people in the dark. Researchers from Ohio State University have developed a new algorithm to predict the impact of power outages and to help utilities restore power.

Earliest first report

Professors and students from the Electrical and Computer Engineering Department have published the first report on the impact of power outages on the economy. The study found that power outages can have significant economic impacts, ranging from lost productivity to increased costs of goods and services.

Parker wins COE alumni award

Robert Parker, assistant professor of computer science, has been named the 2015 College of Engineering (COE) Outstanding Young Alumni Award winner. The award recognizes his contributions to computer science and his achievements as an alumnus of Ohio State University.

Alumni and Innovation

Ohio State ECE alumni have made significant contributions to engineering and technology. From startups to large corporations, ECE graduates are shaping the future of innovation.

Selection of ECE awards and honors

Ohio State ECE faculty and students have been honored with prestigious awards and recognitions. These awards highlight the excellence and impact of our research and education.

New Faculty, 2015

Ohio State University has announced the hiring of new faculty members in the Electrical and Computer Engineering Department. The new faculty bring expertise in various fields, including renewable energy, artificial intelligence, and cybersecurity.