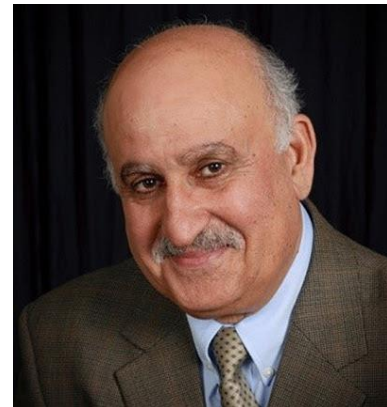


Department of Electrical and Computer Engineering

Summer 2022

Students are drawn to the Department of Electrical and Computer Engineering at Illinois Institute of Technology because of our research reputation, research faculty, and research opportunities. This semester's newsletter highlights all the ways we continue to improve on these strengths.

Thanks to a generous gift from one of our corporate partners, Keysight Technologies, we were able to update and renovate the Walter L. and Virginia B. Cherry Electronics Laboratory to give our students the latest in cutting-edge technology for their hands-on experiments.



Our department recently established a major design experience course. Several student projects that were developed through the course became winners or runners-up in the Grainger Computing Innovation Research Competition and the ECE Day Research Panel Competition.

This newsletter features Kaitlyn Graves (EE, M.S. EE '22), a graduating Accelerated Master's Program student who received second place in the outstanding paper competition at an Institute of Electrical and Electronics Engineers (IEEE) conference for her work relating to mmWave radar and artificial intelligence.

Also included in this newsletter is the high-powered research of Associate Professor Ian Brown, an electric machine designer who is developing optimization techniques for electric motors and generators. His research has received funding from the Ford Motor Company.

Be sure to read the article on one of our innovative alumni, Piyush Desai (M.S. EE '04, Ph.D. '09), who propelled the research he started while at Illinois Tech on switch reluctance motors into a multimillion-dollar company, Turntide Technologies, that continues to research and patent the latest in motor technology.

Jafar Sanie

Walter and Harriet Filmer Chair Professor of Electrical and Computer Engineering
Department Chair

NEWS HIGHLIGHTS



Are Computers Really on the Verge of Designing Electric Motors, Too?

Associate Professor Ian Brown has caught the attention of Ford Motor Company with his computer-driven design of electric machine components that provide some surprising results.

[Read More](#)



Keysight Technologies Equipment Modernizes Undergraduate Electronics Labs

A gift of state-of-the-art testing and measurement equipment by Keysight Technologies to the Department of Electrical and Computer Engineering's Walter L. and Virginia B. Cherry Electronics Laboratory will help students gain industry-relevant skills.

[Read More](#)

[Professor of Electrical and Computer Engineering Mahesh Krishnamurthy Leads Illinois Tech EcoCAR Electric Vehicle Challenge Team](#)

[Read More ECE News](#)

STUDENT NEWS



Gaining Practical Experience in Engineering

Kaitlyn Graves (EE, M.S. EE '22) says the flexibility of the Accelerated Master's Program allowed her to pursue the engineering courses that she found most exciting and the opportunity to pursue a study away experience in France.

[Read More](#)

[2022 ECE Day: Seminars and Student Research Competition](#)
[Illinois Tech Cybersecurity Student Organization Locks Down Record-Breaking National Championship](#)

[Read More ECE Student Stories](#)

ALUMNI NEWS



Building the Motor Ahead of Its Time

Piyush Desai (M.S. EE '04, Ph.D. '09), vice president (motor design) and co-founder of Turntide Motors, turned the electric motor industry upside down by revolutionizing the design of a near-forgotten motor type.

[Read More](#)

[***Read More ECE Alumni Stories***](#)

ECE IN THE NEWS

2021—Stars in Computer Networking and Communications (*Networking Networking Women*) Associate Professor of Electrical and Computer Engineering
Lin Cai

“Video Commentary: Are Microgrids the Perfect Power System?” (*Energy News Network*) University Distinguished Professor
Mohammad Shahidehpour

“Chicago’s Bronzeville to House America’s First Community Microgrid” (*The Energy Mix*) University Distinguished Professor Mohammad Shahidehpour