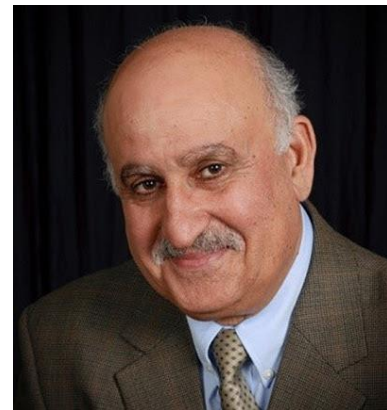


## Department of Electrical and Computer Engineering

### Spring 2023

The spring semester has started, and we are moving swiftly in pursuit of our academic mission and strategic plans. We have wonderful news to share from fall 2022 of our amazing students' national and international achievements, outstanding faculty accomplishments, and our generous alumni support.

We have received a generous gift from ECE alum Adrian Nemcek (EE '70) and his wife Lorna for a new state-of-the-art laboratory for our students. The Adrian and Lorna Nemcek Lab provides the hands-on research experience that all of our graduating seniors are required to have for their major design experience capstone course.



Four ECE students that participated in the major design course put a team together and entered the 2022 Keysight Innovation Challenge. The Keysight Innovation Challenge is a global competition to create an Internet of Things device to monitor carbon emissions and also identify the best way to sequester carbon. Please read about the device that the team created that secured them first place out of 52 international teams.

Also, Illinois Tech's Institute of Electrical and Electronics Engineers (IEEE) student branch has received the 2022 IEEE Chicago Section outstanding student branch and faculty advisor awards, led by chapter President Chloe Rubinowicz (EE, M.S. EE 5th Year) and the branch's faculty adviser, Associate Professor of Electrical and Computer Engineering Erdal Oruklu.

There are more highlights of our students and alumni in this newsletter as well as our remarkable faculty. This semester we celebrated the investiture honoring distinguished ECE faculty member Zuyi Li as the Grainger Chair in Electrical and Power Engineering. This is an extraordinary achievement, endowed to those exceptional in their field, in research, and in education.

Also, Assistant Professor Ren Wang, who joined our department in fall 2022, has been awarded the National Science Foundation's Computer and Information Science and Engineering Research Initiation Initiative Award. This grant will support his exploration of immune system-inspired machine learning foundations for enhancing robustness that aims to infuse key immune system principles into neural networks to improve their overall functionality, particularly their capability to defend against multifaceted perturbations.

[Jafar Sanie](#)

Walter and Harriet Filmer Endowed Chair in Electrical and Computer Engineering  
Department Chair

## NEWS HIGHLIGHTS



### **New Laboratory Supports Experiential Learning in Electrical and Computer Engineering**

The Adrian (EE '70) and Lorna Nemcek Lab enables students to discover innovative solutions for real-world engineering applications using state-of-the-art equipment.

[Read More](#)



## Illinois Tech Team Wins International Challenge with Novel IoT Device to Optimize Tree Planting for Carbon Sequestration

A team of Illinois Tech students, including four ECE students led by Chloe Rubinowicz (EE, M.S. EE 5th Year), won the top prize in the 2022 Keysight Innovation Challenge for its novel “Tree of Life” technology—an Internet of Things device that will monitor soil and atmospheric conditions to help users decide which plants to grow to best sequester carbon and combat climate change.

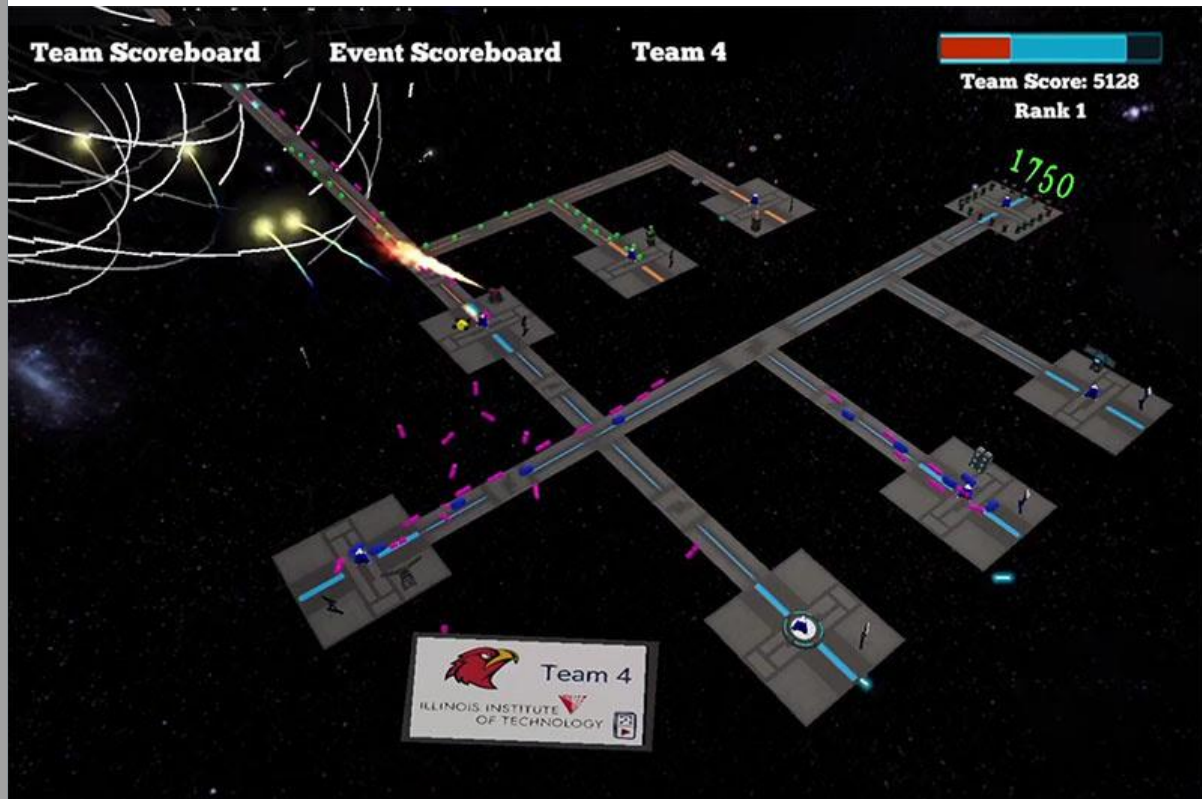
[Read More](#)

[Illinois Tech IEEE Student Branch and Adviser Awarded for Outstanding Service](#)  
[Illinois Tech Invests Zuyi Li as Grainger Endowed Chair](#)  
[Engineering Professor Receives Grant for Immune System-Inspired Machine Learning Research](#)

[Read More ECE News](#)



## STUDENT NEWS



### **Cybersecurity Champs Clamp Down: Student Team Sets Records in National Competition**

A team of students from CyberHawks won the National Centers of Academic Excellence in Cybersecurity Cyber Games National Championship, becoming the first team to eclipse 5,000 points in the competition en route to its championship.

[Read More](#)

**[Hoping to Solve the World's Most Mysterious Problems: Hans Johnson \(M.S. EE '21, Ph.D. EE Candidate\)](#)**

**[Building Tools to Improve Nuclear Facility Safety: Xin Zhang \(M.S. EE '15, Ph.D. CPE Candidate\)](#)**

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

## ALUMNI NEWS



### **From Illinois Tech Motorsports to Tesla**

After interning at Tesla as a student, Ava Kelly (EE, M.S. EE '22) is now working there as a program manager to help launch new power electronics products.

[Read More](#)

**Hardwired to Serve Llewellyn “Don” Means Jr. (EE '89)**

**2022 Alumni Awards: Jeffrey Denenberg (M.S. EE '68, Ph.D. '71) was co-winner of the Alumni Medal and Jiang Hsieh (Ph.D. ECE '89) received the Professional Achievement Award**

**Straight A's James Flynn (EE '77)**

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

## ECE IN THE NEWS

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**[“Illinois Tech Team Wins 2022 Keysight Innovation Challenge with Novel IoT Device to Optimize Tree Planting for Carbon Sequestration” \(Scienmag\)](#)**

**[More ECE in the News](#)**

