
***Grainger Scholarship
Awards***

April 20, 2022



Rensselaer | SCHOOL OF
ENGINEERING



Location: JEC 3117

or by Webex:

<https://rensselaer.webex.com/rensselaer/j.php?MTID=m3c4b2cbff446cb7dc2fe07c08aca92cb>

12:00 pm - Guest Speaker

12:15 pm - Lunch

12:45 pm - Student Presentations and Awards

Speakers:

Joe Chow, NAE, Institute Professor, Rensselaer Polytechnic Institute, School of Engineering, Electrical, Computer, & Systems Engineering Department, Awards Committee, Chair

Sheppard Salon, Professor Emeritus, Rensselaer Polytechnic Institute, School of Engineering, Electrical, Computer, & Systems Engineering Department
Keynote Speaker

2022 Recipients:

Brennan M. Loder, Senior Student

Electrical Engineering

Allan H. Nesathurai, Senior Student

Electrical Engineering

Alyssa J. Noble, M.S. Graduate Student

Electrical Engineering

Guest Speaker



**Sheppard Salon
Professor Emeritus
School of Engineering
Rensselaer Polytechnic Institute**

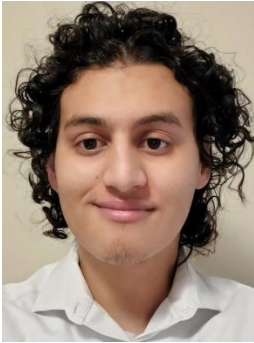
Dr. Sheppard Salon worked at the Westinghouse Electric Company from 1970 - 1978, working on the electromagnetic and thermal design of large machines. In 1978 he joined the Electric Power faculty of RPI where he retired in 2014. Dr. Salon is a registered professional engineer and life fellow of IEEE and received the IEEE Nikola Tesla Award in 2004. He is the author of approximately 200 papers and 2 books with a third, "Eddy Currents: Theory and Applications" scheduled for publication later this year by IEEE press.



My interest in Electric Power Engineering was acquired much more recently than I would like to admit. Growing up on a Black Angus beef farm, fixing electric fencing was the first and most memorable lesson I ever received on short circuits. However, the majority of my time was spent

operating and maintaining heavy equipment; used to feed and clean up after the livestock. I enrolled at RPI as an Undeclared Engineering major and spent the majority of my freshman year rather unsure of what direction I wanted my education and career to go. However, in the summer of 2019, I was given an opportunity to intern at the New York Power Authority's project site in Gilboa, which spectacularly sparked my interest in the study of electric power. My coworkers were conducive to my childlike fascination with the entire hydroelectric power generation and transmission process from the gravity fed hydroelectric units all the way to the switchyards. I was given full binders outlining the processes, as well as the output capabilities of each unit, which I would read at my desk whenever I was ahead on my projects. Following this internship, I immediately declared an Electrical Engineering major, knowing that I wanted to focus on electric power.

Brennan Loder (Senior, UG Student)



“I was inspired to study power engineering by Professor Vanfretti. As a senior, I enrolled in his electrical energy systems class, which exposed me to the real-world applications of power systems. I particularly enjoyed the final class project; the goal

was to model and modify a power grid scenario based on a new set of constraints. This project sparked my interest in the creation and operation of power grids, and this is currently the focus of my research. I am investigating the performance of a hardware accelerated machine learning algorithm to detect power grid instability. Hopefully, this will be able to reliably detect grid instability in real time which will allow grid operators to prevent or reduce the severity of a blackout.

Allan Nesathurai (Senior, UG Student)



“I chose to study electrical engineering because I wanted to eventually go into renewable energy and I felt like this would be a great path to get me there. I wasn't entirely sure how I wanted to

approach the industry (via power electronics, power systems, electrification, etc.), but through classes and internships I developed a fascination with power systems and the electromechanical machines that drive them. This led me to my concentration in electric power.”

Alyssa Noble (M.S. Graduate Student)

Grainger Committee Members

Prabhakar Neti, Professor of Practice

Jian Sun, Professor, Center Director (CFES)

Luigi Vanfretti, Associate Professor

Meng Wang, Associate Professor

Mission Statement

The Grainger Foundation of Lake Forest, Illinois, established in 1949 by Mr. & Mrs. William Wallace Grainger, has provided substantive support over the years to a broad range of organizations including educational institutions, museums, healthcare, and human services

Rensselaer Polytechnic Institute
