

# NEM BLAGOJEVIC

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## Experience

### Electronic Controls Engineer II - Systems

June 2021 - Present  
Roswell, GA

Rheem Manufacturing – Water Heating Division

- Member of controls design team focused on systems integration in the Rheem Water Heater Division.
- Creating system requirements and component selection, certification testing, and post-launch support.
- Creating and maintaining documentation including functional specifications, traceability matrices, software specifications, test specifications, and test reports.
- Developed prototype webpage of proprietary software using VueJS to increase accessibility for engineers.
- Developed test automation script using Python Selenium to automate demand response compliance testing.
- Member of the Consumer Technology Association (CTA) committee overseeing CTA-2045.

## Education

### Kennesaw State University

Jan 2016 – Dec 2020

#### Bachelor of Science in Electrical Engineering (3.5/4.0 GPA)

- **Courses:** C++ Programming for Engineers, Embedded Systems, Control Systems, Ordinary Differential Equations, Electromagnetic & Microwave Applications, Probability & Statistics

## Research Experience

### Machine Learning for RF Networks

Jan 2020 – May 2020

Directed Study – Kennesaw State University

- Built linear regression machine learning system to predict values in an integrated circuit using Python
- Predicted the values of an L-shaped RF matching network with 90% accuracy
- Utilized the output values in the Keysight ADS circuit simulation to generate power reflection data
- Libraries utilized include NumPy, Pandas, scikit-learn, matplotlib, and pickle

### Wireless Power Transfer

Aug 2019 – Dec 2019

Directed Study & Senior Design – Kennesaw State University

- Created Keysight ADS simulation of manufactured rectifier circuit and matching network on single PCB
- Modeled parasitic components on the matching network, capacitors in charge pump, and transmission line effects
- Performed large signal analysis in the frequency and time domain and reduced power reflection into charge pump
- Presented project at IEEE RFID 2020 conference

## Skills

Languages:	Python, HTML/CSS, JavaScript
Frameworks:	VueJS, CSS Bootstrap
Libraries:	Selenium, NumPy
Technologies:	Git, MQTT, Jira, JAMA, Asana, SharePoint
Software:	Keysight ADS, MATLAB, Simulink, CST Studio, LabVIEW, Enterprise Architect Microsoft Word, PowerPoint, Excel, Outlook, OneDrive
Soft Skills:	English, Serbian, Croatian, Bosnian, and Montenegrin – Native Fluency Spanish - Beginner