



PROFESSIONAL PROFILE

A graduating senior majoring in electrical engineering concentrating in the area of power electronics. Pursuing graduate school to further my education in power electronics focusing on wide bandgap generation. Worked in a two man team researching different modulation techniques for a five level cascaded H-bridge power converter to see which would prove to be more efficient. Lead a team of electricians and mechanics to update machines on a cereal line to improve plant efficiency saving money and having less downtime. Troubleshoot industrial systems using PLC software to ensure that the plant kept producing product. Built an all in one maintenance tool for the high voltage service industry at ABB to help the sales engineers and service engineers save time and money selling and fixing circuit breakers. This included working with multiple different engineers and marketing personnel to bring a working document that could start being used to help the customer. Trained to build, test, and service dead tank breakers at ABB.

CORE QUALIFICATIONS

- Team Player
- Industrial Experience
- Academic Research Experience
- Team Leader

EXPERIENCE

Undergraduate Research through CPES at Virginia Tech (September 2016 – Present)

Worked in a team of two to research different modulation techniques for a cascaded H-bridge converter based on efficiency. This will be used in a larger system that will improve efficiency at medium voltages for data centers.

- Researched Level Shift Modulation
- Conducted Presentations on the Research
- Ran Simulation using MATLAB
- Read Literature Surveys on Modulation

Intern at ABB, Mt. Pleasant, High Voltage Service Division (Summer 2016)

Worked in the factory and the office learning the business and then improving efficiency in both places

- Developed an All in One Service and Maintenance tool
- Built, Test, and Serviced Dead Tank Breakers
- Improved Sales Engineering Efficiency

Intern at Kellogg, Lancaster Plant, Engineering and Packing (Summer 2015)

Worked at the Lancaster Cereal Plant improving plant efficiency, installing new equipment, and troubleshooting problem throughout the plant.

- Troubleshoot Industrial Systems using PLC software
- Updated Equipment Drawings
- Working in Diverse teams to install new equipment on the Lines
- Lead a team to update obsolete machines

EDUCATION

Virginia Polytechnic Institute and State University: BS Electrical Engineering with a Minor in Mathematics (2013/2017). GPA: 3.75/4.00. Expected to graduate in May 2017.