

BRANDON JOHNSON

AMES, IA 50014

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Objective:

To obtain a full-time job after graduation in December 2020.

Education:

Iowa State University, Ames, IA

Bachelor of Science in Electrical Engineering (Expected Graduation December 2020)

Professional work experience:

Midcontinent Independent System Operator, Carmel, IN (May 2020 – August 2020)

Outage Coordination Electrical Engineering Intern

- Assisted the Engineering teams in creating a long-term outage evaluation process. Created a flow chart of how the process operates.
- Compared and identified differences in MISO's PSSE and EMS grid models.
- Created a tool that automated the creation of reports to be sent to other departments at the company.

Iowa State University, Ames, IA (May 2020 – August 2020)

Research assistant – Electric Power Research Center

- Created dynamic simulations using MATLAB that tested how a fault would affect current grid-forming inverter controls.
- Wrote and documented the logic of multiple control schemes to be used in simulations.

Lincoln Electric System, Lincoln, NE (May 2019 – December 2019)

Substation Protection & Controls and Design Engineering CO-OP

- Perform a system wide analysis of Lincoln Electric System's overcurrent relay settings to improve the reliability of the distribution system. Wrote a formal report and presented the study's findings to the Substation, System Planning and SCADA managers. The suggested changes started to be implemented before I left the company.
- Assist with the design and maintenance of substations by updating and creating schematics with AutoCAD.

Iowa State University, Ames, IA (January 2019 – May 2019)

Teaching Assistant – EE 285 (Intro to C Programming)

- Assist the professor to educate students in Iowa State University's Intro to C Programming course.
- Design two final projects with a focus towards Electrical Engineering.
- Instruct multiple lab sections with a review of the current week's material to ensure students have a successful lab.

Bison Gear and Engineering, St. Charles, IL (May 2017 - August 2017 & May 2018 - August 2018)

Application Engineering Intern & Quality Engineering Intern

- Collaborated with other engineers to develop a system that detects if a motor is too loud to ship.
- Designed a procedure that included a timeline of implementation and highlighting project goals.
- Use data acquisition (DAQ) hardware to quantify sound by collecting vibration data.
- Write MATLAB scripts that filter out background noise from the signal as well as frequency domain analysis.
- Use LabVIEW software to set limits and deviations allowed from a nominal motor's vibration signal.

Technical Skills:

- Experience with embedded systems design using ARM-based microcontrollers, C/C++, Python, MATLAB, Simulink, PSSE, EMS, AutoCAD, Linux, GIT, Spice, Verilog, FPGA, LabVIEW, Oscilloscope, DAQ.