

Brian Holden

bmholden@gmail.com | (225) 270-1143 | Active TS Clearance

Experience

Electrical Test Engineer, Johns Hopkins University Applied Physics Lab, Laurel, MD July-2019 – Present

- Designed printed circuit boards used to test various electrical parts including diodes, FETs, op-amps, and ASICs using Altium.
- Performed electrical testing on various electrical parts under different temperature settings to ensure proper functioning which met certain voltage and current requirements.
- Processed and prepared electrical data on tested parts using MATLAB to ensure the quality of the parts.
- Attended classes in Analog Electronic Circuit Design, FPGA Design, Data Structures, and MATLAB.

Transmission Engineer, NRG Energy, New Roads, LA March 2018 – June 2019

- Operated as Subject Matter Expert for NERC compliance associated with facility ratings and the Under Frequency Loading program.
- Prepared engineering cost estimates for substation facilities and time-dependent detailed plans for substation projects.
- Participated in SERC Engineering Committee meetings and in SERC compliance issues and prepared required engineering planning forms for SERC.

Mentor, The Gardere Initiative, Baton Rouge, LA August 2013 – June 2019

- Tutored over 100 students from low-income families in mathematics and other subjects and advised them in their future regarding their education.
- Introduced new and innovative ways to inspire learning in students and helped add students to the program.
- Established a strong working relationship with local schools in the area to help create a better experience for the students.

Electrical Engineer, Dow Chemical, Plaquemine, LA February 2015 – October 2016

- Applied technical expertise on troubleshooting failures, repairs, and evaluating whether equipment is designed to meet its intended service conditions.
- Oversaw root cause investigations when predetermined triggers were met which resulted in the improvement of safe work practices for future workers.
- Performed load calculations to determine correct wiring and transformer sizes for various pieces of equipment throughout the plant.

Graduate Researcher, Louisiana State University, Baton Rouge, LA January 2013 – December 2014

- Succeeded in conducting research to improve low frequency geophones by designing an op-amp feedback circuit and published a thesis on the completed research.
- Administered testing on the analog circuit in a lab setting using oscilloscopes and power supplies to improve overall function and design of the circuit.
- Excelled in computing classes on Python and C++ to complete assignments that involved interfacing a Raspberry Pi with an Arduino microcontroller.

Electrical Engineer, AST Engineers, Baton Rouge, LA April 2010 – December 2012

- Surveyed commercial and residential buildings on electrical issues such as lighting, fire alarms, and power to consult with owners on how to proceed with electrical renovations or new builds.
- Performed field work to aid in the creation of drawings for lighting, fire alarm, and power systems.
- Computed load calculations to determine safe thresholds for all equipment and wiring used throughout the designed renovations.

Education

- **Master of Business Administration (Duke University) May 2023 - Present**
- **Master and Bachelor of Science, Electrical Engineering (LSU) December 2014 & 2009**