William Lorey

Experience _____

Garmin International Rolla, MO

Software Engineering Intern

May 2018 - Aug 2018

- Developed avionics verification software in C to ensure robustness, government compliance, and code coverage
- Analyzed input routing for an avionics flight deck simulator and streamlined the process resulting in a 40% reduction in modules and an 8% reduction in code
- Architected an encryption process for protecting flight deck configuration passwords

Missouri S&T Solar Car Team

Rolla, MO

President *Aug 2017 - Aug 2018*

- Led a 40-person interdisciplinary team of volunteers in constructing Missouri S&T's 2018 Solar Car, Independence
- Secured 2.5x growth in financial contributions for the team from on-campus organizations
- Allocated and managed a six-figure budget towards designing, building, testing, and racing the vehicle

Logistics Manager

Aug 2016 - Aug 2017

• Raced in and managed team/race logistics for the 2016 American Solar Challenge and 2017 Formula Sun Grand Prix. *In 2016, our 18-person team achieved 4th place in North America*

Electrical/Software Team Member

Aug 2015 - Aug 2018

- Designed, implemented, and tested a driver interface PCB and related software in C to control and drive the Solar Car
- Engineered a database system using SQL and PHP enabling long distance telemetry for near real time data tracking
- Developed battery characterization software in Python used in constructing the car's battery pack

LMI Aerospace Cuba, MO

.NET Developer Intern

May 2017 - Aug 2017

- Expanded and maintained a C# .NET system used by over 130 employees for tracking customer order statuses, factory processes, reporting, production TV displays, and government compliance as the facility's sole developer
- Developed a plant-wide emergency alert web app that integrated employee's smartphones with the intercom system

The Boeing Company

St. Louis, MO

Information Technology Intern

May 2016 - July 2016

- Engineered and implemented a social network using SharePoint for leveraging innovation from a team of 300+ Boeing employees. *Project was winner of the 2016 Boeing ITCS Intern Challenge*
- Modernized IBM Rational ClearCase and ClearQuest enterprise solution architecture diagrams for elevated ease of accessing nationwide data center information

Languages & Software _____

Python (fluent) C/C++ (proficient) HTML/CSS (proficient) PHP (prior experience)

Git Vim Visual Studio Code Composer Studio KiCad

Honors & Activities

Boy Scouts of America - Eagle Scout

Collegiate Eagle Scout Association - Vice President, Treasurer

Missouri S&T – **Dean's List** (Fall 2015 – Spring 2019)

Missouri S&T Computer Science Department - Academic Achievement Award

Missouri S&T Electrical and Computer Engineering Department - Undergraduate Research Assistant

Tau Beta Pi Engineering Honors Society - Member