

EDUCATION

The University of Texas at Arlington

- Masters of Science in Mechanical Engineering, December 2016 (GPA: 3.56)
- Bachelors of Science in Mechanical Engineering, May 2014
- Relevant Courses: Machine Design, Robotics, Automatic Control, Optimal Control, Dynamic system modeling and simulation.

EMPLOYMENT

Tesla Motors, Fremont, CA

June –August 2016

Intern, Powertrain Manufacturing Operations

- Improved the automated manufacturing for the Model S & X powertrains by reducing need for manual intervention in various manufacturing stations by as much as 62%.
- Supported in critical hardware installations, reducing manufacturing downtime and enabling cost savings of up to \$9600 a week.
- Provided previously unavailable information to senior engineers and executives by developing SCADA systems using PLC, python and SQL scripts to automate data gathering from the manufacturing lines.
- Prevented hydraulic leaks and added new functionality to test cells by redesigning fixtures using SolidWorks.

Cummins Inc, Columbus, IN

June – December 2015

Manufacturing Controls Engineer Co-op

- Improved the automated manufacturing for the Cummins ISV8 5L Engine by programming PLC's to solve recurring logic issues across the plant.
- Fail-safed a critical manufacturing station and saved the company \$31500 by devising and implementing cost-effective hardware and programming changes.
- Redesigned Human-Machine interfaces across the factory to ease interactions between equipment and production associates.
- Ensured minimal production downtime by performing time sensitive troubleshooting of manufacturing lines.
- Provided new functionality to aid in improvement modifications by creating large scale 3D Models of manufacturing stations using PTC Creo.
- Improved factory documentation by updating electrical drawings to account for changes made to manufacturing lines.
- Designed a mobile interface for assistance requests between operators and shop floor personnel.
- Wrote in house training manuals on PLC programming for shop floor personnel and newly hired controls engineers.

PROJECTS

Team Lead, Automated Dart Gun for AUVSI, Virginia Beach, VA

Spring 2014

- Led a team of 5 engineering students to build an automated gun for the annual AUVSI RoboBoat competition.
- Programmed the gun to track shapes, colors and distances towards targets using computer vision.

IOS Front End Development, OS Hack, Github HQ, San Francisco, CA

August 2016

- Built a speech analysis IOS app with a team of fellow SF Bay Area interns for the Github Open Source Hackathon, using the IBM Watson speech to text API.
- Developed app front-end in Xcode using Swift.

TECHNICAL SKILLS

- Software: PTC Creo, Solidworks, AutoCAD, MATLAB, Microsoft SQL Server, MySQL, RSLogix 5000, Ignition, Xcode
- Programming languages: Python, C++, Swift, SQL and Ladder Logic

ADDITIONAL EXPERIENCE

- Engineering Senator, Student Congress, UTA
- NSBE & ASME affiliation, UTA Chapters
- Member, Rotaract at UTA, a subdivision of Rotary International