

Russell Sutton

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EDUCATION

Bachelor of Science, Aerospace Engineering

The University of Texas at Austin

December 2020

EXPERIENCE

R&D Engineering Intern – Door Controls USA

June 2019 – Present

- Developed IoT embedded systems to establish data collection practices, initiating quality assurance
- Consulted managers and end-users to develop product specifications and identify feasible solutions
- Led decision making on appropriate microcontroller and software platforms to meet requirements
- Directed product development and delegated tasks to team members based on their areas of expertise
- Established product development timelines to ensure buffer time for product deployment issues
- Implemented I²C and TCP/IP communication protocols
- Constructed Python app for Raspberry Pi's responsible for recording data to SQL Server via custom GUI
- Utilized test driven development to take products from design stages to full implementation
- Aided team members with navigating a Linux development environment
- Extensively documented development process to ease legacy support in addition to training

Battery Protection System Team – UT Solar Vehicles Team

August 2019 – Present

- Developed Arm Cortex -M4 firmware for mission critical safety systems
- Integrated sensors to monitor battery module current flow for competition safety specification compliance
- Enabled rapid sensor integration with compartmentalized libraries for reliable reuse of code
- Automated testing to validate system's reliability prior to integrating with expensive battery module

Project Manager – Unmanned Aircraft System: Senior Design

January 2020 – Present

- Mediated customer-contractor relationship with a focus on transparency through regular status reports
- Delegated roles based on individual's prior experiences and relevant interests to ensure peak productivity
- Guided overall product direction, oversaw general product quality

Computations Team – Texas Aerial Robotics

December 2017 – January 2019

- Developed object tracking and trailing programs to mimic commercial drone software
- Utilized image recognition software based on neural networks for drone localization and navigation
- Learned collaborative programming best practices, including code reviews and formatting conventions

Borden Dairy Plant Project – Simulation Modeling

January 2019 – May 2019

- Collected on-site data to develop an accurate baseline production model
- Utilized discrete event analysis software to model production capabilities and illustrate capacity limitations
- Formed recommendations based on model results and made cost-based evaluations of multiple solutions
- Presented results to industry professionals and received feedback on the integrity of recommendations

SKILLS

Proficient: Embedded C, C++, Python, MatLab, SimuLink, SQL, Excel, Arena Simulation, Raspberry Pi, Arduino

Familiar: ARM Keil Debugger, SolidWorks 3D CAD, Java, LabVIEW