Aaron Neustedter

aneusted@purdue.edu   linkedin.com/in/aneustedter   github.com/aaron97neu

Summary

Software Engineer pursuing Masters degree in Computer Science at Purdue University. Seeking a full time position after December 2020 graduation

Education

Purdue University   West Lafayette IN • Fall 2016 - Winter 2020
- Master's in Computer Science, December 2020
- Bachelor's in Computer Science - Software Engineering Concentration, May 2019
- Treasurer for the Purdue Waterski Team 2018 - 2019, collegiate 3 event skier

Experience

Purdue University - Graduate Research Assistant   West Lafayette, IN • Fall 2019 - Present
- Developed various applications and tools for The Purdue Open Ag Technology and Systems Center
- Architected new software stack for existing ISOBlue edge computing device that runs on tractors, combines, and other agricultural equipment
- ISOBlue Avena stack hosts Docker containers on Toradex ARM SBCs running Debian Linux. Uses Wireguard for VPN connection and Ansible to deploy and update nodes

GE Transportation/Wabtec - Customer Application Engineering Intern   Melbourne FL • Summer 2019
- Simulated train runs with Matlab to ensure product viability of specific tracks
- Analyzed and advised in re-creation of algorithm that aligns train data recorder information from different trains and starting points
- Led project to artificially inject error in track database to determine effects of incorrect track elevation

CNH Industrial - Systems/Model Based Design Engineering Intern   New Holland PA • Summer 2018
- Supported the Case IH Flagship Combine team with the development of the model year 2019 combine
- Modeled and corrected the combine's automatic cleaning fan function
- Verified safety-critical communication protocol between the control handle and processing module

Rockwell Automation - Firmware Test Engineering Intern   Mequon WI • Summer 2015 - 2017
- Automated firmware tests designed to replace manual testing of Rockwell's drives
- Reduced test runtime from 4-40 man-hours to 1-20 mins via automated tests
- Built automated test infrastructure to develop and run automated tests

Software Development Skills

- Proficient in C/C++, Python, Bash, Type/JavaScript, and Java
- Familiar with ARM/x86, C#, R and Matlab/Simulink
- Formally educated and experienced working in Scrum/SAFe development methodologies

Volunteering

- Mentored West Lafayette FRC Team 1747 high school students
- Eagle Scout service project created organ donation campaign resulting in over 120 people becoming donors
- Advanced Open Water diver, hunted invasive lionfish and surveyed queen conch and reef health in Belize
- Taught English and built an educational hydroponic farming system for children in Costa Rica