Alden Davidson

adavidson@pm.me
https://github.com/ananaso

EXPERIENCE

SupraCoders: Software Development Immersive | USAF — Oct 2020 – Present
- 3-month full stack development bootcamp with Defensive Cyber Operations - Satellite follow-on assignment
- Configured Hack-A-Sat network with Puppet
- Developed COSMOS TT&C protocol decoder

Mission Director, GPS III, USAF/USSF | SMC, LA AFB — Apr 2020 – Present
- Commanded 12-member team for readiness events and launch & early orbit operations (L&EO)
- Conducted L&EO for SV04

Project Officer, Operational Resiliency 2/2B, USAF/USSF | SMC, LA AFB — Nov 2019 – Present
- Led current-phase production and next-phase technical evaluation
- Spearheaded two add-on efforts to accelerate next-phase schedule
- Directed ground software verification testing

RT Leaders | Munich, Bavaria, Germany — Jun 2017 – Dec 2017
- Programmed FANUC and Kuka models in both factory and laboratory locations
- Implemented email-based support and ticketing system using MantisBT and integrated CppCheck into Jenkins

RIT Computer Engineering Department | Rochester, NY — Dec 2016 – May 2017
- Researched and implemented networking protocols within a virtual domain for realization of real-world radio use cases, using a synthesis of C++ and Python

SKILLS

Languages: CSS, Java, Javascript, LaTeX, Python, VHDL

Software: Docker, GNU/Linux, PostgreSQL/MariaDB, React, Qt

Foreign Languages: German – Intermediate

EDUCATION

Rochester Institute of Technology | Rochester, NY
- Bachelor of Science in Computer Engineering, May 2019
- Minor in Military Studies and Leadership, May 2019

PROJECTS

AT-AT - Aggregate Tasker Administration Tool
- Proof-of-Concept to replace Department of Defense's Tasker Management Tool
- Designed and implemented tasker inbox view/response features and accompanying database and API
- Built with Javascript, Express, PostgreSQL, React, and AstroUXDS CSS

Low Cost Fundus Camera | Senior Design
- Designed low-cost functional modern fundus camera capable of capturing screening quality retinal images
- Interfaced Raspberry Pi with linear actuators, motor HAT, and controllable LEDs
- Programmed user interface in PyQt

Semi-autonomous Cell Battery Constructor
- Planned and implemented operations for FANUC R-30iB to construct experimental cell batteries
- Designed semi-autonomous function for space-constrained, pumped argon environment

Genesee River Raft | Personal Project
- Constructed raft by hand from fallen timber and rope
- Successfully floated it from RIT to the University of Rochester boathouse