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

EDUCATION

Rochester Institute of Technology | Rochester, NY

- Bachelor of Science in Computer Engineering, May 2019
- Minor in Military Studies and Leadership, May 2019
- GPA 3.55

SKILLS

Languages: IATEX, Python, Qt, VHDL, ARM Assembly, C/C++, Java

Hardware: FANUC & Kuka robots, Digital Multimeter, Oscilloscope, Function Generator

Software: GNU/Linux operating systems, command-line interfaces

Foreign Languages: German – Intermediate

EXPERIENCE

United States Air Force

May 2019 – Present

- Commissioned as a 2nd Lieutenant with an initial assignment as a Developmental Engineer.

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

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.

Sol's Underground | Rochester, NY | Student Manager

Sep 2014 - May 2018

- Supervise 4+ student employees per shift
- Ensure compliance with food safety procedures
- Manage customer problems or complaints

PROJECTS

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

USAF Ribbon Rack Visualizer | Personal Project

- Developed PyQt application for visualizing ribbon racks with proper order of precedence.
- Created with option to extend support to other branches of the military.

Genesee River Raft | Personal Project

- Constructed raft by hand from fallen timber
- Successfully floated it from RIT to the University of Rochester boathouse.

COMMENDATIONS

Boy Scouts of America

- Eagle Scout, Computer Sustainability and Recycling Drive
- Order of the Arrow: Vigil Honor

National German Honor Society

- Chapter President, 2018-2019