Jonah Lefkoff

LinkedIn |Github | jonah@lefkoff.com | Cell# 303-717-4342

EDUCATION:

Northeastern University, GPA 3.72, Boston, MA May 2026
Candidate for Bachelor of Science in Computer Engineering and Computer Science, Junior Year

Activities: Private Pilot License – Instrument Rated, Amateur Radio – General Class (KF0INO), WRBB 104.9FM Campus Radio (Radio Host), Northeastern Wireless Club (Lab Manager/Webmaster), Northeastern Outdoors Club (Treasurer)
Coursework: Logic and Computation, Embedded Design: Enabling Robotics, Fundamentals of Computer Science, Discrete Structures, Probability and Statistics

Dawson School, Weighted GPA 4.85, Boulder, CO, *Specialized in Computer Science* May 2021
Activities: FIRST Robotics (Captain), Varsity Cyclocross (Captain), Theater Lighting and Sound (Student Head)
Awards: Distinction in Coding and Innovation, Academic Excellence Award (Sole Recipient)

KEY SKILLS: Python, C++, C, Rust, Java, Node-RED, Docker, Verilog, Electrical hardware design, 3D printing, Unix scripting, Arduino, KiCAD, AutoCAD, SolidWorks, MATLAB, VBA, networking, soldering, test equipment use, broadcast engineering.

EXPERIENCE:

Guardian Agriculture, Woburn, MA January 2023 – June 2023
Robotics Software Engineer Co-Op

- Designed and engineered a custom on-craft camera solution including hardware and software (python) to aid in precision landing **Worked collaboratively** with a small team from design through field testing. This sub-assembly was reviewed by a leadership team and accepted as a component on all future aircraft.
- Created custom logging software to monitor RF network performance parameters for increased safety by introducing telemetry that triggers auto protection actions which can auto land an aircraft and increased operator awareness through thoughtful presentation of that telemetry to a pilot.
- Implemented a ground-based networking system topology to increase reliability of field operations for customers. **Developed SOPs**, tested hardware for high reliability in the customer operating environment
- Reworked internal tooling to aid in software development lifecycle by **decreasing build** times by 75% contributing to the organizations **CI/CD pipeline efficiency**
- Researched and executed a 1 line change on the flight controller platform to enable timestamp sync on data analysis **eliminating** the need for manual data alignment.

Freewave, Boulder, CO October 2019 – August 2020
R&D Intern, Embedded Systems

- Developed major kernel refactor for ZumIQ line of IIOT radio systems. Added increased processor overhead to support modern customer needs. The new kernel design supported modern development practices. This refactor was pushed to the **global fleet** of Freewave radios in industrial platforms around the world.
- Designed and engineered client demo solutions on radios using Node RED and Visual Basic.
- Implemented a custom water pumping solution using ZumLink radios reducing excess power usage by 80%.

ArcherDX, Now Invitae, Boulder, CO July 2018 – December 2018
R&D Intern, Bioinformatics
Analyzed complex genetic data using Python and Jupyter resulting from Illumina sequencers.

- Engineered algorithms to detect remission in ctDNA for lung cancer patients as part of the TracerX project in Nature.
- Learned to work with high power computational servers to create efficient code that executes across very large datasets.

Conjured Co, Boulder, CO March 2017 – November 2017
App Development Intern

- Used PHP and the Laravel framework to develop apps for the Shopify e-commerce platform.
- Developed an application to encourage customers to round up payments to charity, as well as a discount code application.
- Learned to work with SQL databases for secure information and web app portability.

References: Furnished on request.