Aaron Ky-Riesenbach

ky-riesenbach.a@northeastern.edu, (626) 689-5025, 7 Speare PI #137414-RUB, Boston, MA 02115 GitHub, aaronkvriesenbach.com

Education

Northeastern University, Boston, MA

May 2025

Bachelor of Science in Computer Engineering, 3.72 GPA, Dean's List

Coursework: Physics 2, Calculus 3, Differential Equations/Linear Algebra, Computing Fundamentals, Circuits and Signals, Embedded Design, Digital Design

Skills

Electronics: Microcontrollers, PCB design, hardware prototyping/debugging, I2C/SPI/serial communication, soldering

Software: Linux, Office suite, LaTeX, JetBrains IDEs, Git, MySQL/MariaDB, AWS

Programming: Java, JavaScript/TypeScript + React, C++, Python (certified Microsoft Tech. Associate), SQL, shell; typing 120 WPM

Projects

Spotify playlist cleaner webapp

September 2020 - May 2021

- Web-based application replaces explicit songs on selected playlist with clean counterparts
- Utilizes Spring Boot REST API and React/TypeScript front-end
- Previously deployed via AWS EC2 and Amplify hosting + NGINX routing

GPS bike tracker July 2019

- Designed and fabricated GPS bike tracker through Northwestern IoT design program
- Tested hardware and firmware designs against functionality constraints, including size, weight, battery life, and security
- Created prototype circuit boards and enclosures
- Designed final circuit board to be printed

Work Experience

Northeastern University Institute for the Wireless Internet of Things

September 2022 - Present

Software engineer (undergraduate research position)

- Identifies issues and weaknesses in current implementation of wireless network emulator resource manager
- Collaborates with supervisors to develop and implement fixes and improvements
- Tests improvements using version control system and pre-production environments to ensure functionality

Tesla Government, Falls Church, VA

March 2020 - August 2021

Software developer, QA test engineer

- Developed and tested complex new features for government-contract knowledge management system based on microservice architecture
- Tracked and fixed bugs reported by users and developers
- Performed manual functionality and security tests for new features and services prior to release
- Developed complete automated test suite to ensure functionality and code coverage using Selenium
- Managed continuous integration and deployment system via Jenkins
- Praised by supervisor for rapid skill development and adaptation

Activities

Northeastern University Outing Club (NUHOC)

September 2022 - Present

- Member of climbing leadership, organizes rock climbing outings and events
- Loj Committee trainee, develops skills and helps to maintain "Loj" camping facilities located in New Hampshire

Northeastern University Men's Rowing, Division 1, Coxswain

September 2021 - May 2022

- Facilitated on-the-water practices by steering and making technical corrections
- Led land practices and workouts
- Communicated with coaches and athletes to coordinate logistics, obtain training data, and perform other duties as required
- Devoted 25-30 hours per week to athletics while undertaking full course load