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Objective: To obtain a position in software development with opportunities for career growth.

Available June 2025

Education: B.S. in Software Engineering GPA: 3.2 RIT May 2025

Programming Languages: Java, Python, TypeScript, JavaScript, C++, C

<u>Frameworks/Libraries/Miscellaneous</u>: Git, Spring, Spring Boot, AWS, Django, Next.js, ReactJS, PostgreSQL, Flask, Prisma, Firebase Authentication, Tailwind, Sass, Spark, Node.js, UML, JUnit, PyTest, Simulink, Vector CANoe, Vector CANape, JetBrains IDEs, VSCode, Trello, Jira

Work Experience:

Biamp – Firmware Engineer: Core Technologies Team

Jan 2024-Present

Started as a co-op and now a part time member of the Core Technologies team.

- Created Network Discovery Tool using **Python** with **PyQt5** for discovery and modification of Tesira devices through a GUI which was not previously available on Linux platforms. **Containerized** project using **PipEnv** and **Pyenv**. This tool provided **automated binary flashing**, monitoring for dozens of system audio channels, and the only software method for factory resetting
- Developed GPIO kernel drivers to add new required functionality to the existing drivers for the USB subsystem.
- Implemented event listeners and receivers for USB subsystem and updated **Device Tree** configurations to support new hardware features.

RIT SHED Makerspace - Software Lead

May 2023-Aug 2024

Working for the new RIT SHED Makerspace leading a team of software engineers creating systems needed for makerspace operation.

- Led Development of access control software using MUI, React, ExpressJs, GraphQL, NodeJS, Knex.js PostgreSQL
- Deployed access control software on Heroku using CI/CD Pipeline powered by GitHub deployment
- Created various multi-disciplinary projects with makerspace staff such as a 3d printed robot arm, and custom authentication boxes to control various machines and workstations
- Integrated RIT internal Shibboleth SAML authentication and utilized other RIT internal APIs for student account tracking

WITR 89.7 – Internal Developer

Oct 2022 – Aug 2024

Working for the WITR 89.7 radio station as an internal developer assisting development of their website and creating internal tools for monitoring and logging.

- Utilized ReactJS, TypeScript, Sass, Java, and Spring Boot stack to create a stream playback tool
- Containerized project with **Docker** and deployed applications to custom Proxmox virtual environment
- Created an internal playback tool for engineering and programming departments to listen and analyze DJ samples, interviews, and DJ shows on both WITR 89.7 FM and underground

American Axle & Manufacturing - Electric Controls Software Rotational Co-op

May 2022 – Dec 2022

Collaborated with a large international **ASPICE** team developing embedded **AUTOSAR ASIL** rated software. Worked under the Technical Manager & Architect with the goal of updating, automating the maintenance of, and creating new processes for artifacts and artifact generation.

- Updated architecture models in MATLAB and Simulink
- Automated the collection of data to create **ARXML** files
- Developed Electric Controls Unit Integration testing scripts using CAPL with Vector CANoe
- Implemented VBA scripts in Excel to quickly deploy supporting scripts to development team
- Utilized IBM EWM for source control, project requirements, and task tracking

Projects:

Rate My Classmate Jan 2023-March 2023

Rate My Classmate is a platform for rating classmates and teammates in an academic setting. It allows students to rate their classmates on a variety of metrics to determine how proficient of a teammate they are. This was a class project.

- Implemented a full stack application with a small team of student developers using Next.js
- Utilized Agile and Scrum processes including retrospectives, burndown charts, user stories, and Kanban boards
- Acted as **Project Manager** leading scrum meetings and assigning user stories to the other developers
- Automated deployment using Vercel CI/CD
- Utilized TailwindCSS and ReactJS for front end development with Firebase authentication
- Developed backend API using Next.js and Prisma and hosted database and server on AWS

Hot Foods Feb 2023

Hot foods is a **full-stack web and mobile application** that provides on campus food options for RIT students and learns users preferences using tinder style swiping and simple machine learning. Hot Foods enables students to make health-conscious food choices.

- Created a custom web scraper using **Selenium** for RIT dining food options and nutrition information from RIT's NetNutrition
- Developed an API using Java Spring Boot and developed custom database schema using Sprint Boot's Repositories
- Utilized Dart and Flutter to develop a cross-platform front end that allows for web, mobile, or desktop deployment