

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

Available June 2025

Education: B.S. in Software Engineering

GPA: 3.3

RIT May 2025

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

Frameworks/Libraries/Skills: Git, Spring, Spring Boot, AWS, Django, Next.js, ReactJS, PostgreSQL, Flask, Prisma, Firebase Authentication, Cognito Authentication, Infrastructure as Code(IAC), Terraform, 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 - Dec 2024

Started as a co-op and then became 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** to support new hardware features
- Implemented internal tool for managing layer 1 switches, connected to a **MongoDB** database for configuration storage with a custom **Python** API for integration with automated unit and regression tests

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 user management, training, and 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 custom authentication boxes to control various machines and workstations with custom software for access control
- Integrated RIT internal **Shibboleth SAML** authentication and utilized other RIT internal APIs for student account tracking

WTR 89.7 – Internal Developer

Oct 2022 – Aug 2024

Working for the WTR 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 WTR 89.7 FM and underground

American Axle & Manufacturing - Electronic 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:

Food In Sight – Technical Project Lead

Aug 2024 - Dec 2024

Developed a web app to help users identify allergens and dietary restrictions in food using AWS cloud technologies and a custom-trained **AWS Rekognition** model. Acted as the **technical project lead** making development and infrastructure decisions.

- Created a serverless backend using **AWS Textract** and **AWS Translate** for text extraction and translation from food labels and A custom-trained **AWS Rekognition** model which analyzed food images to detect ingredients.
- Integrated **AWS Lambdas, API Gateways, S3 Buckets, and DynamoDB** for scalable data movement, storage, and processing
- Used **Terraform** for **Infrastructure as Code** to automate the deployment of the serverless backend, allowing all infrastructure to be provisioned with a single command. This optimized the cost, scalability, and extensibility of the project.
- Built frontend with **React, TypeScript, and Vite** for efficient development and fast user experience.

Rate My Classmate – Technical Project Manager

Jan 2023 - Mar 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. During this project I acted as the **Technical Project Manager**.

- 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 while still writing code
- Automated deployment using **Vercel CI/CD** for easy build validation and quick real-time deployments
- 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**