

Experience

CambioML

San Francisco, USA

MACHINE LEARNING ENGINEER INTERN

Sep 2024 – Present

- Working on the ML team to improve LLMs through reinforcement learning from human feedback.

German Aerospace Center

Stuttgart, Germany

SOFTWARE ENGINEER INTERN

Jan 2024 – Apr 2024

- Gathered and pre-processed data from **100+ sensors** in the RTA Climatic Wind Tunnel using **SQL** and **Python** to replicate extreme weather conditions.
- Developed a heat transfer tool using **Python** and **Flask** to calculate the **optimal cooling capacity** for rail vehicles.
- Built a real-time communication system for trains travelling through Berlin using **OpenVPN**, achieving a **40% latency reduction** for event-based logs.
- Designed a fuel cell model utilizing Raspberry Pi to showcase EV charging solutions at the Hannover Messe 2024 Trade Fair to 200,000 attendees.

Cineplex Entertainment

Toronto, Canada

SOFTWARE DEVELOPER INTERN

Jan 2023 – Apr 2023

- Established robust API security measures using **OpenID Connect** and **OAuth 2.0** standards, reducing **unauthorized access incidents by 99.9%**.
- Spearheaded the company migration from manual to automated testing across **46 enterprise tools** using **Python** and **Robot Framework**.

Tehama Technologies

Ottawa, Canada

SOFTWARE DEVELOPER INTERN

May 2022 – Aug 2022

- Reduced the creation time of virtual work environments by **75%** by automating cloud-service management using **AWS CloudFormation** and **Docker**.
- Handled **80,000+ logs daily** by implementing a scalable logging and metrics pipeline with **ElasticSearch**, **Fluentd**, **Kibana**, **Grafana**, enabling real-time feedback on system failures and reducing **storage costs by 12%**

KitchenMate

Toronto, Canada

SOFTWARE ENGINEER INTERN

Sep 2021 – Dec 2021

- Developed an intuitive frontend user interface for the kiosk's touchscreen using **React.js** and **Typescript**, reducing **rendering times by 25%**.
- Built a payment system for the kiosk using **Stripe's API**, supporting **contactless payments** and ensuring PCI compliance.
- Automated the cooking process for the Smart Cooker by implementing QR code dish recognition and live updates with the backend system.

MIT Driverless

Cambridge, USA

SOFTWARE ENGINEER INTERN

Jan 2021 – Apr 2021

- Built a **Python** and **ROS**-based computer vision model for autonomous race cars using data from **GPS**, **LiDAR**, **radar**, and **camera sensors**.
- Improved lap times by **30%** by implementing a real-time path planner in **C++** and **MATLAB** using one-to-one track cloning, automated lap timing, and collision detection algorithms, leading to top speeds of **171 mph** (275 km/h).

Projects

TextScanner | Next.js, TypeScript, Python, Flask, AWS

[github](#)

- Built and deployed a cloud-native document processing application using **AWS S3**, **Lambda**, **Textract**, and **DynamoDB**.
- Implemented user authentication, document search, batch uploads, text summarization, and an equation solver.

Skills

- Programming Languages:** C, C++, Java, Python, JavaScript, Go, Swift, MATLAB.
- Libraries/Frameworks/Tools:** Node.js, React.js, MySQL, PostgreSQL, MongoDB, Django, Flask, Docker, Kubernetes, Linux.

Education

University of Waterloo B.A.Sc. in Computer Engineering

2020 – 2025

- Honours with Excellent Standing, GPA: 3.7
- 2024 JR Coutts International Experience Award recipient.
- Coursework: Data Structures & Algorithms, Systems Design, Databases, Operating Systems, Networks, Distributed Computing.