

# RAYAN AHMAD

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## TECHNICAL SKILLS

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**Languages:** Python, JavaScript, TypeScript, Ruby, Golang, Java, C/C++, HTML, CSS, Bash

**Frameworks:** ReactJS, ExpressJS, NodeJS, Flask, FastAPI, Pandas, NumPy, Matplotlib, TensorFlow, Scikit-Learn

**Technologies:** AWS, GCP, Docker, Kubernetes, Nomad, Terraform, Linux, PostgreSQL, MongoDB, Git, BuildKite

## EDUCATION

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University of Waterloo

Expected Grad 2026

- Candidate for Bachelor of Applied Science in **Mechatronics Engineering**
- Relevant Courses: Real Time Operating Systems, Data Structures and Algorithms, Introduction to Microprocessors and Digital Logic, Experimental Measurement and Statistical Analysis

## WORK EXPERIENCE

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Co-Founder | [NearMe \(Backed by DMZ\)](#)

May 2023 - Present

- Led a team in building a full-stack app using a **MERN stack**, and **AWS**, winning **\$5000** in DMZ competition for best MVP and pitch
- Designed an **event-driven architecture** using **Redis**, resulting in a **50%** reduction in data processing latency and ensuring real-time responsiveness for user interactions

Software Engineering Intern | [Wonolo](#)

May 2023 - Aug 2023

- Developed a **Python CLI** tool to automate **Nomad** deployments, streamline testing, and sharing environments, benefiting over **60** developers
- Optimized a **Homebrew formula** with **Ruby**, and a virtual environment, accelerating tool command execution by a factor of **5**
- Engineered an internal queuing tool that integrates with **Buildkite**, **GitHub**, and **Nomad**, enabling developers to deploy to production via **Slack**, enhancing the deployment CI process efficiency by **70%**
- Integrated a **NodeJS** application with **Bugsnag** and **N8N** to automate **workflows**, and **bug-tracking** to promptly notify developers, reducing response time by **90%**

Software Engineering Intern | [WealthAgile \(Incubated by DMZ\)](#)

Aug 2022 - Apr 2023

- Deployed AI system into production environment by designing a **microservice architecture** on **AWS** and **GCP**, using scalable services implemented in **Python**, for **300** active users
- Created **CI/CD** pipeline using **Git**, **GitHub Actions** (workflows), **Terraform**, **Docker**, **Kubernetes**, and **AWS** to automate testing, container registry management, and rollout in **EKS** reducing deployment time by **95%**
- Programmed **RESTful APIs** for **genetic algorithm** machine learning model, and crypto exchanges such as Kraken, Coinbase, & Binance using **MongoDB**, **FastAPI**, **Postman**, and used **binary search algorithm** to speed up code by a factor of **6**
- Built a **multi-threaded** data collector to collect cryptocurrency OHLCV time-series data from multiple data sources and stored it in **Postgres** to speed up collection by **15** times
- Developed multiple **quantitative trading** applications, re-balancing algorithms, back-testers to get performance and metrics such as Sharpe ratio, with best practices such as **documentation**, file structure, **unit and integration testing**, **logging**, and **test-driven development**, reducing development time by **60%**

Data Engineering Intern | [TealBook](#)

Jan 2022 - Apr 2022

- Applied Bidirectional Encoder Representations from Transformers (**BERT**) model on supplier data to find eligible suppliers for a small business certification using **TensorFlow** to produce results up to **85%** accuracy
- Analyzed data issues, trends, and patterns in **Big Query**, using **SQL**, **Python**, **Pandas**, and **RegEx**
- Constructed solutions for cleaning & preventing data issues, recorded research to **Jira** and **Confluence documents** on **Atlassian**, and presented updates in meetings following **Scrum & Agile methodologies**

**Interests:** Entrepreneurship, Investing, Skateboarding, Piano, Gym, Mixed Martial Arts