

Aryaman Dhingra

a23dhing@uwaterloo.ca | github.com/ad-world | linkedin.com/in/ad-world | aryaman.dev

Education

University of Waterloo

Waterloo, ON

Bachelor of Computer Science

Expected Graduation April 2025

- **GPA:** 3.8 / 4.0
- **Relevant Courses:** Operating Systems, Algorithms, Data Structures, Compilers, Object Oriented Programming, Database Systems and Management, User Interfaces, Software Design and Architecture

Experience

Software Engineer Intern, Developer Experience

May 2024 - August 2024

BitGo

Palo Alto, CA, United States (Remote)

- Developed an **OpenAPI documentation** generator using **Typescript** and **swc** to generate documentation for platform endpoints, to ensure **100%** API documentation accuracy.
- Led a large-scale migration of the Wallets API, resulting in **100%** of APIs automatically generating documentation using the OpenAPI generator (up from **0%**)
- Created a custom **GitHub** action to trigger automatic updates to a documentation repository, reducing manual documentation updates by **95%**
- Created a test suite with over **100** tests and **4000** lines to ensure complete confidence in updates to the OpenAPI generator

Software Engineer Intern, Frontend Platform

September 2023 – December 2023

Versa Networks

Santa Clara, CA, United States (Remote)

- Implemented an option search feature in **JavaScript**, allowing users to find network configuration options and services over **~70%** faster
- Spearheaded the implementation of an upgrade pipeline with **Bash** and **Jenkins**, saving **5** hours of developer work weekly
- Migrated a network interface list from **Backbone.js** to **React.js**, resulting in a **55%** increase in initial load speed

Software Engineer (Contract)

September 2023 – December 2023

Quintilon

Montreal, QC, Canada

- Developed a robust **Typescript**, **LangChain**, and **GraphQL**-based microservice to handle **LLM** conversations, enabling seamless and concurrent interactions with a generative AI agent
- Implemented a Federated GraphQL API using **Apollo Gateway**, including end-to-end security with embedded **JWT Authentication** and **Casbin** role-based access control policies to ensure secure data retrieval
- Designed a cloud-native **microservice-based architecture** for a generative-AI business creation product, resulting in a **scalable** and highly efficient system

Software Engineer Intern

January 2023 – April 2023

OMERS

Toronto, ON, Canada

- Developed a financial business process with **Java** and **React**, that allowed over **500,000** members to withdraw funds from their extra contributions
- Implemented a secure employee validation system with **Express.js** and **Oracle DB** to enable supervisors to view restricted transactions, ensuring **data security** and **system compliance**

Software Engineer Intern

May 2022 – August 2022

OMERS

Toronto, ON, Canada

- Refactored two **Express.js** APIs with **Typescript**, reducing errors and **Kubernetes** pod crashes by **~75%**
- Enhanced application security for three services by migrating **Kubernetes secrets** to **Hashicorp Cloud** with **dotenv**, reducing application vulnerability

Projects

Joosc | *Java, C++, Flex, Bison, Docker*

- A compiler written for Java 1.3 with C++, Flex, and Bison. Implements complete lexing, parsing, multiple phases of static analysis, and code generation for i386 architecture. Uses modern C++ features such as variants.

Pathfinding Visualizer | *React, Typescript, Chakra UI, Graph Algorithms*

- An online tool that visualizes how different graph algorithms find paths from a starting point to an ending point, while accounting for weights, walls, and more. Currently supports four major graph search algorithms.

Technical Skills

Languages: JavaScript, Typescript, C++, Python, Go, C, Kotlin, Java, SQL

Frameworks/Tools: Node.js, React, Next.js, Express.js, Flask, MongoDB, Spring Boot, OracleDB, GraphQL, LangChain

Developer Tools: Git, GitHub Actions, GitLab CI, Docker, Jira, Linux, Google Cloud Platform, Kubernetes, Azure