

Aryaman Dhingra

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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

September 2023 – December 2023

Versa Networks

Santa Clara, CA, United States

- 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**
- Refactored an **Express.js** controller involving fund withdrawals using **stored procedures** with **Oracle DB**, leading to **~30%** fewer API calls

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%**
- Employed the **Ping Identity API** to reduce member registration errors by **~20%** for over **40,000** members
- Enhanced application security for three services by migrating **Kubernetes secrets** to **Hashicorp Cloud** with **dotenv**, reducing application vulnerability

Software Engineering Intern

May 2021 – August 2021

Malvor

Qatar, Doha

- Designed and developed a bulk upload system with **Express.js** and **JavaScript**, allowing stores to upload multiple products from one file, decreasing time spent uploading products **by 73%**
- Implemented **role-based access control** for the admin panel using **Express.js middleware** and **JSON Web Tokens** resulting in fine-grained access to administrative actions and endpoints

Projects

Tiny Compiler | Go, C

- A lightweight compiler that compiles BASIC to C code, written in Go. Designed and built a **lexer**, **parser**, and code **emitter**.

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