

Dinu Wijetunga

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Languages C++, Python, Go, SQL, TypeScript, Kotlin, JavaScript, C, Gremlin Graph, Java
Frameworks Kafka, PySpark, NestJS, Flask, React, Redux, React Native
Tools Postgres, Docker, Kubernetes, AWS, Git, Unix, Postman, Azure Cloud, CosmosDB, MySQL, Swagger

Experience

Cohere AI

Python

SOFTWARE ENGINEERING INTERN

Sep 2022 - Dec 2022

- Optimizing NLP models through the development of large-scale data aggregation tools, leveraging ELT pipelines and **PySpark**
- Deduplicating large datasets (**800+ GB**) to reduce compute requirements and improve scaling when training language models

Coinsquare

Go | Python

BACKEND SOFTWARE ENGINEERING INTERN

Jan 2022 - May 2022

- Designed, developed, and tested scalable data infrastructure for a leading Canadian **cryptocurrency** exchange platform
- Reduced annual vendor costs by **30%** as the primary backend developer for a new PDF generation and storage **microservice**
- Secured storage of trade records for **500k users** by finding and eliminating a **GraphQL** query path traversal vulnerability
- Reduced data-fetching request latency by **25%**, setting up a **Kafka** consumer and producer connected to **Postgres**
- Leveraged **Docker** containers and **Kubernetes** pods to deploy to testing environments and monitored health with **Logz.io**

Cloudspark Labs

TypeScript | NestJS

BACKEND SOFTWARE ENGINEERING INTERN

May 2021 - Aug 2021

- Developed, debugged, integrated, and streamlined deployment of **5+ microservices** for a collection of Enterprise HR apps
- Reduced auth API requests by **15%** through the development of an **API Key** microservice with deployment via **Azure Pipelines**
- Improved querying speed for **1000s** of interconnected data points by **30%**, switching **SQL** queries to Gremlin **Graph** Traversals
- Contributed to **Microsoft's Open Source** PowerPlatformConnectors by developing and submitting a **Custom Connector**
- Improved the efficiency of **Azure** Workflow setup by **60%** through automation of tasks using API **webhook** triggers

The Shoe Project

TypeScript | Go

SOFTWARE DEVELOPER - CREATED A FREE WEB APP FOR A NON-PROFIT ORGANIZATION

Sep 2020 - May 2021

- Built an **interactive map** to display **75+** stories written by Canadian immigrant women with an **admin portal** to manage stories
- Contributed to a **Go REST** API implementing **JWT** user auth, **Mapbox** API, and user **roles**, with deployment on **Heroku**

Ryerson University Aerospace Department

MATLAB | AutoCAD

SOFTWARE DEVELOPER INTERN

Aug 2019

- Optimized a test aircraft's energy efficiency by **30%** by developing a **MATLAB** program to analyze solar panel sunlight absorption

Activities

UWaterloo Blueprint

Nonprofit Consulting

PRODUCT MANAGER

April 2021 - Present

- Co-leading** a team of **12** developers and designers to create a course building platform to educate about domestic abuse
- Managing delivery schedule and budget to meet client's timelines and eliminate **\$5000** in current platform fees for NPO
- Conducting regular user interviews to create a comprehensive and engaging custom solution for educating **400+** users

EZventory

Python/Kotlin Side Project

INVENTORY MANAGEMENT APP FOR SMALL ORGANIZATIONS. Available on Google Play!

May 2020 - Aug. 2020

- Designed to help school clubs and sports teams keep track of their supplies with easy cloud saving and **CSV** exports
- Python/Flask** backend: **REST** API, **JWT** auth, and **MySQL** DB (**SQLAlchemy**); containerized **Docker** deployment on **AWS EC2**
- Kotlin/Android** frontend: user **authentication**, **filtering** and **CRUD operations** on inventory items, and **HTTP** API requests

Community Volunteer

480+ Volunteer Hours

VARIOUS NONPROFIT ORGANIZATIONS

Jun. 2016 - Mar. 2020

FlickPicker

TypeScript Side Project

A TOOL TO HELP PICK A MOVIE FOR WATCH PARTIES WITH FRIENDS

Dec. 2020 - Present

- TypeScript** frontend: **React Native** for **cross-device** compatibility and **Redux** for state management; leveraged React **hooks**

Education

University of Waterloo

Waterloo, Ontario

BACHELOR OF SOFTWARE ENGINEERING, B.SE

- CGPA:** 4.0, Dean's Honours List 2020-2022
- Awarded Kurt and Marianne Strobele Engineering Scholarship (\$24 000) for leadership and community service in tech