# **Shaishav Patel**

shaishav.patel@uwaterloo.ca www.shaishav.me

# 

## **EDUCATION**

## University of Waterloo

BCS Candidate, Honours Computer Science Co-op

(Expected) Apr. 2024 GPA: 3.7/4.0

Relevant Coursework: Algorithms and Data Structures, Operating Systems, Object-Oriented Programming,

Algorithm Design and Data Abstraction, Designing Functional Programs

#### **EXPERIENCE**

Coinbase

San Francisco, CA

Software Engineering Intern

May 2022 – Sep. 2022

- Setup **gRPC** endpoints, and utilized **Go** to implement various elements of the error handling & database layers in Social Graph Service which handles more than **100k requests/week** for the social feed in Coinbase Wallet
- Used Go to migrate profile follows endpoint in Wallet API to a graph-based client, serving 12,000+ monthly active users
- Implemented CRUD database calls by writing Gremlin queries for **AWS Neptune** Graph Database to achieve **204ms** p95 end-to-end latency

## Royal Bank of Canada

Toronto, ON

Software Developer Intern

Jan. 2022 – Apr. 2022

- Created a **Java microservice** using **Apache Camel** to process up to **500 transactions/second** by validating, transforming and routing retail e-Transfer transactions to help detect and report fraudulent activity
- Built data mapping library with 97% unit test coverage to facilitate processing of transactions by 5 downstream systems
- Led migration of 3 legacy Java microservices to new app code and integrated them with new CI/CD pipelines

## Royal Bank of Canada

Toronto, ON

Software Developer Intern

May 2021 – Aug. 2021

- Utilized **Spring Boot** to add features and resolve bugs in a **Java** microservice for mapping numerous transaction types, used by 3 downstream teams to process over **\$5 million** in e-Transfer transactions daily
- Built Java microservice to validate transactions and generate e-Transfer account statements for 100+ enterprise clients
- Leveraged Apigee to deploy a REST API gateway with OAuth 2 and expose microservice to internal API consumers

## **Imagine Communications**

Waterloo, ON

Automation Developer Intern

May 2020 – Aug. 2020

- Developed **Python** scripts for end-to-end testing of REST APIs to reduce regression testing time by over 80%
- Created and automated 150+ tests to increase test coverage of smoke & regression test suite

## TECHNICAL SKILLS

Languages & Markup Technologies/Frameworks Developer Tools

Python, Java, Go, C/C++, Kotlin, JavaScript, Gremlin, Bash, HTML/CSS Spring Boot, gRPC/Protobuf, Flask, Apache Camel, Thymeleaf, React Git, AWS, Jenkins, JUnit, Pivotal Cloud Foundry, UrbanCode Deploy

## **PROJECTS**

## **Athletics Inventory**

- Created a Flask web application to add, remove, edit and monitor inventory of athletics clothing
- Used AWS Elastic Beanstalk and AWS CodePipeline to implement a basic CI/CD pipeline via GitHub Actions

#### CourseMatch

- Built online platform with Python and React to connect remote learning students in the same courses
- Generated unique tokens through Firebase to verify students and only allow access to channels for their enrolled courses