

# Ziven Rokhit

416-841-0067 | [zrokhit@uwaterloo.ca](mailto:zrokhit@uwaterloo.ca) | [zivenrokhith.github.io](https://zivenrokhith.github.io) | [linkedin.com/in/zivenrokhith](https://linkedin.com/in/zivenrokhith) | [github.com/zivenrokhith](https://github.com/zivenrokhith)

## EDUCATION

### University of Waterloo

Sept 2022 - Apr 2026

*Bachelor of Mathematics with a Minor in Computer Science*

*Waterloo, ON*

- Relevant Courses – Data Structures & Algorithms, Object-Oriented Programming, Proofs

## EXPERIENCE

### Software Engineer Intern

Sept 2024 – Dec 2024

*Ford Motor Company*

*Dearborn, MI*

- Led on-call production support for **FordPro.com**, leveraging **Datadog**, **GCP**, and **Tekton** to monitor cloud infrastructure and ensure maximum uptime for **55,000+** daily users.
- Developed a system using **TypeScript** and **React** to facilitate data privacy settings updates for over **250+** Ford Fleet Managers across Europe and North America.
- Performed real-time cache invalidation for **10K+** entries using **JavaScript** to synchronize **Redis** cache.

### Software Architect & Engineer

Jan 2024 – Present

*CourseClutch.com*

*Toronto, ON*

- Developed and deployed a **RESTful API** using **Python**, **FastAPI**, and **AWS Lambda** serverless functions, optimizing it for scalability and handling **40K+** users with reduced infrastructure costs.
- Designed a NoSQL database using **DynamoDB**, containerized cron jobs with **Docker**, and orchestrated the system with **AWS EventBridge**, resulting in a **33%** reduction in customer wait times.
- Integrated **Stripe API** to embed a secure payment system within a **React** frontend, ensuring safe transactions.

### Software Engineer Intern

Jan 2024 – Apr 2024

*TD Bank Group*

*Toronto, ON*

- Developed client onboarding software used by **20,000+** customers daily, built with **Java**, **Spring** and **React**, integrating with over **150** enterprise APIs and microservices, creating a seamless customer experience.
- Automated a tedious deployment process using **Bash scripts**, integrating with **CI/CD** pipelines on Azure, reducing team deployment time by **3** hours per week.
- Engineered a webpack caching system with the **Spring Framework** and **Craco** to asynchronously update customer app versions, leading to a **15%** improvement in client satisfaction rates.

### Fullstack Engineer Intern

May 2023 – Sept 2023

*Doctalk Inc*

*Toronto, ON*

- Developed an ad rotation system using **TypeScript** and **React**, boosting on-site advertisement views by **300%**.
- Migrated the production database using a **Python ETL script**, achieving a **25%** reduction in memory usage.
- Crafted **10+** custom **React** components to common SDK, simplifying codebase, reducing compilation time and improving maintainability.

## PROJECTS

### Toronto Crime Forecasting Model | Python, Pandas, Scikit-learn, ArcGIS

- Collected, cleaned, and encoded 300,000 raw data points using **Pandas**, creating a structured dataset ready for analysis. Experimented with fitting various machine learning models to evaluate their performance.
- Developed an interactive spatial map using **Python** to visualize data and identify key patterns and trends.

### RSA Encryption Website | Python, Flask, Cryptography, HTML/CSS

- Engineered a secure API utilizing **Python** and **Flask**, featuring a custom RSA-2048 encryption algorithm developed in collaboration with University of Waterloo mathematics professors.

### Chess Engine | C++, Makefile

- Created a **C++** Chess Engine featuring a CPU opponent and integrated computer graphics.

## TECHNICAL SKILLS

**Languages:** Python, TypeScript, JavaScript, Java, C/C++, HTML/CSS, SQL

**Frameworks:** React, Express, Next.js, FastAPI, Flask, Pandas, Datadog, Spring/Spring Boot

**Developer Tools:** AWS, Docker, Node.js, Tekton, Redis, PostgreSQL, GCP, Linux, Bash, Postman