

Ziven Rokhit

zrokhit@uwaterloo.ca | [Website](#) | [Linkedin](#) | [Github](#)

EDUCATION

University of Waterloo

Bachelor of Mathematics and Computer Science

Waterloo, ON

Sep 2022 - Apr 2027

- Relevant Courses: Data Structures & Algorithms, Object-Oriented Programming, Web Programming

EXPERIENCE

Amazon Web Services (AWS)

Software Engineer Intern (Step Functions Core Services)

Vancouver, BC

May 2025 - Aug 2025

- Optimized distributed architecture to resolve a top-priority customer pain point, ensuring consistent performance for **200,000+ users** during peak traffic
- Designed a Java caching layer to reduce inter-service traffic, cutting latency by 6% for **5B+ daily requests**
- Built a Java/Python framework empowering 100+ engineers to simulate realistic production traffic pattern surges

CourseClutch.com

Founder & Lead Engineer

Toronto, ON

Jan 2024 - Dec 2024

- Architected the entire serverless AWS backend, implementing Stripe payments, FastAPI REST APIs, and cron scheduling to support **2,000+ student users**
- Built a Python-based system using AWS Lambda and DynamoDB to monitor and update 9,000+ college courses, achieving up to **50% faster** performance than competing solutions
- Led a team of 4 engineers to launch the platform, deploying to 2 major Canadian universities in under 3 months

Ford Motor Company

Software Engineer Intern

Dearborn, MI

Sep 2024 - Dec 2024

- First intern trusted with on-call support, managing deployments, CI/CD pipelines, and cloud infrastructure with GCP, Datadog, and Tekton, ensuring 99.9% uptime for **55,000+ daily users**
- Developed a Python script for real-time Redis cache invalidation across 100,000+ records, resolving data inconsistencies for adjacent teams dependent on our platform

TD Bank Group

Software Engineer Intern

Toronto, ON

Jan 2024 - Apr 2024

- Built a CRM onboarding app from scratch using Java, Spring, and React, used by **20,000+ customers daily**
- Automated a tedious manual deployment process with Bash scripts, saving the team 3 hours/week

Doctalk (Startup)

Software Engineer Intern

Toronto, ON

May 2023 - Aug 2023

- Migrated production database from RedisGraph to PostgreSQL via Python ETL, cutting memory usage by 20%
- Architected an ad rotation system in TypeScript and React, boosting on-site advertisement views by **300%**

PROJECTS

🔗 AI Lead Generation Platform | *Python, LangChain, Pinecone, OpenAI, React*

Published Project

- Built a fullstack AI sales lead generator with RAG, using LangChain to orchestrate OpenAI LLMs, ingesting **10,000+ companies** into Pinecone embeddings for semantic lead qualification

🔗 RSA Encryption Website | *Python, Flask, JavaScript, Cryptography*

Undergraduate Research Project

- Engineered a secure Python & Flask encryption app with a custom RSA-2048 algorithm, designed in collaboration with University of Waterloo mathematics professors and adopted by **50+** classmates

TECHNICAL SKILLS

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

Frameworks: Spring/Spring Boot, FastAPI, LangChain, Node.js, React, JUnit, Mockito, Pandas

Developer Tools: AWS (Lambda, SQS, DynamoDB), Docker, Redis, Tekton, Git, Postman