Dhrubo Karmaker

dhruv.karmaker@gmail.com | linkedin.com/in/dhrubokarmaker | github.com/dhrubokarmaker

TECHNICAL SKILLS

Languages: Python, Java, SQL, JavaScript/TypeScript/HTML/CSS, Lua, C++
Tools & Frameworks: AWS, Google Cloud Platform, Spring, React, Node.js, Express, MongoDB , Firebase, Selenium

EXPERIENCE

Amazon　　　　　　　　　　　　　　　　　　　　　　　　　　　　Jun. 2024 – Aug. 2024
Software Development Engineer Intern　　　　　　　　　　　　　　　　　　　*Vancouver, BC*
- Architected a distributed data pipeline leveraging AWS Lambda and SQS to ingest millions of royalty payments, indexing them into OpenSearch to enable comprehensive payment search capabilities.
- Engineered a dual-mode indexing system featuring both real-time streaming and one-time bulk export functionality, ensuring data consistency between DynamoDB source and OpenSearch.
- Designed a high-performance microservices architecture that reduced payment search latency by 80%, while maintaining system reliability and processing accuracy at scale.

Jostle　　　　　　　　　　　　　　　　　　　　　　　　　　　　Sep. 2023 – Apr. 2024
Backend Developer Intern　　　　　　　　　　　　　　　　　　　　　　*Vancouver, BC*
- Implemented optimized S3 file deletion logic, reducing storage costs by 30 % through asynchronous processing using app events, while removing all previous stale attachment files.
- Developed Java MDC-based logging framework to standardize and preserve contextual information for actions on file attachments, enabling seamless tracing across microservices.
- Redesigned utility classes, mitigating dependency injection issues common in Spring applications by eliminating bean usage in static methods.

Student Price Card Ltd.　　　　　　　　　　　　　　　　　　　Jan. 2022 – Aug. 2022
Software Developer In Test Intern　　　　　　　　　　　　　　　　　　　*Vaughan, ON*
- Developed and thoroughly documented a robust end-to-end website testing framework using Selenium.
- Wrote reusable Python test code that covered 90% of the cases required for regression testing.
- Facilitated automatic parallel testing in different browsers using Selenium Grid.
- Integrated the tests in the CI/CD pipeline using Docker and Google Cloud Run feature for stable deployment.

University of British Columbia　　　　　　　　　　　　　　　　　　Jan. 2022 – Present
Undergraduate Teaching Assistant　　　　　　　　　　　　　　　　　　　*Vancouver, BC*
- Mentored students on object-oriented feature development in Java, testing using JUnit, and debugging.
- Conducted office hours to teach software engineering principles which improved my communication skills, elevating my ability to articulate technical concepts.
- Attained 100% favorable rating from students who received my guidance.

PROJECTS

etaGPT | *React, Express, Firebase*　　　　　　　　　　　　　　　　　　　　May 2023
- Co-developed an innovative AI-based application, integrating a WhatsApp and Telegram bot overlay with OpenAI's GPT-3.5 language model to provide users with a variety of educational and entertainment services.
- Enhanced the app's knowledge base beyond its training limit by leveraging Google Search API and Axios library for web scraping, providing users with real-time updates on recent events.
- Designed an interactive React analytics page leveraging Firebase Events, providing insightful data on user activity and feature popularity to facilitate continuous bot optimization.

CashTrack | *React, Express, MongoDB, JWT*　　　　　　　　　　　　　　　　Dec 2022
- Architected and developed a full-stack web application that tracks users' monthly expenditures.
- Built a responsive React front-end and maintainable client-side code using state management hooks & routers.
- Utilized Express.js to build an optimized REST API and implemented JWT authentication.
- Implemented and integrated a MongoDB database to model and organize user transaction logs.

EDUCATION

University of British Columbia　　　　　　　　　　　　　　　　　　　Vancouver, BC
Bachelor of Science in Computer Science, GPA: 88%　　　　　　　　　　　*Sep. 2020 – May 2025*