ANJALI GUPTA

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EDUCATION

University of Waterloo – *Candidate for BCS: Computer Science* Sep 2020 - Apr 2025

Relevant Courses: Object Oriented Programming, Data Structures and Algorithms GPA: 3.8

Professional Affiliations: Grace Hopper (2021 Attendee), Women in Computer Science Club (Member)

SKILLS

Languages: JavaScript, TypeScript, Python, C++, Dart, Java, Kotlin, SQL, GraphQL, HTML, CSS, SASS
Frameworks: Node, React, Redux, Apollo, Express, Flutter
Tools: Firebase, MongoDB, DynamoDB, Postman, Git, PostgreSQL, Linux, Kafka

EXPERIENCE

Amazon – *Software Development Engineer Intern* May 2023 – Present

- Led the development of a debugging visualization tool using **Java** and **React**, which tracks attribute generation events, reducing time for root cause analysis in attribute mismatches from 8 hours to less than 1 minute
- Authored a design document, including a database decision between **Amazon S3** and **DynamoDB**, alongside a strategic design pattern selection, fostering seamless project execution
- Employed the aspect-oriented programming (**AOP**) design pattern to eliminate cross-cutting concerns, reducing code clutter and duplication by 35%
- Ensured code execution exclusively with specific tags, decreasing the amount of unnecessary data stored in **DynamoDB**, yielding monthly cost savings of over $1,000+

Wealthsimple – *Software Developer Intern* Jan 2023 – Apr 2023

- Implemented error code handling in **Kotlin** for missing accounts, achieving a 27% decrease in account errors
- Migrated existing code to a new topic using **Kafka**, ensuring forwards and backwards compatibility, and reducing production issues caused by schema evolution from 47 issues to less than 5 issues monthly
- Developed comprehensive unit tests to verify the accurate routing of messages to the new topic, achieving a test coverage of 100% and enhancing the reliability of message delivery
- Enhanced transaction flow service by grouping **PostgreSQL** record retrieval, reducing data retrieval delays by 23%

University of Waterloo – *Software Developer* Jan 2022 – Aug 2022

- Spearheaded the formation of end-to-end features to provide user surveys for a research project involving 4,000+ participants using **MongoDB**, **Express**, **React**, and **Node**
- Established secure password recovery flow via reset links using **JWT**, increasing user retention rate by 17%
- Enabled **MongoDB** foreign keys to create relations between relevant schemas, reducing memory usage by 2GB
- Created asynchronous queue via **Node** to send update emails biweekly, improving user participation by 55%

PointClickCare – *Software Engineer Intern* May 2022 – Aug 2022

- Developed functionality for users to take pictures and attach images to conversations in a cross-platform mobile application via **Flutter**, increasing customer retention rate by 56%
- Created methods in **Swift** and **Kotlin** to send image data to the **Twilio SDK**, transmitting 7,000+ images monthly

WSIB Innovation Lab – *Full-Stack Developer Intern* Sep 2021 – Dec 2021

- Constructed client facing QR code scanner and PDF reader for a novel employee vaccine verification system using **React**, reducing verification time by 33%
- Implemented **REST APIs** served with **Flask** to store the vaccine status of employees via CRUD operations, establishing a robust framework that holds data for 3,000+ employees at WSIB

PROJECTS

Sign Language Detector Python | TensorFlow | NumPy | OpenCV | Keras

- Created an application that prints the Sign Language letter corresponding to a user's hand gesture
- Trained and tested data by implementing a **CNN** using TensorFlow, resulting in an **85% detection accuracy**