

BILAL BAIG

SOFTWARE ENGINEER

bilal.baig316@gmail.com | bilalbg.com | linkedin.com/in/bilalbg | github.com/bilalbg

PROFESSIONAL EXPERIENCE

Amazon

Feb 2022 – Mar 2023

Software Development Engineer

Toronto, ON

- Orchestrated development of **Java**-based microservices used in processing 1000+ daily inventory events to enhance reporting precision of global inventory levels, improving item fulfillment efficiency
- Led automation of correcting inaccurate inventory stores by devising a service using **AWS Lambda**, **AWS S3**, and **DynamoDB**, achieving a **15+% reduction in completion time** of manual inventory data correction
- Spearheaded redesign of an inventory tracking system, utilizing **AWS Step Functions**, AWS Lambda and DynamoDB, leading to an **improvement of 40% in operational accuracy** over previous iteration
- Supervised and mentored junior engineers to effectively contribute to development of complex supply chains systems, on-boarding them with **Java Spring Boot**, **TypeScript** and AWS-based microservices
- Automated process of cleaning development logs by creating an automated **Cron** script that selectively clears 100+ log files weekly, mitigating service errors previously occurring during critical development periods

Sabbatical

Sep 2023 – Sep 2024

OPEN-SOURCE EXPERIENCE

Hack For LA

Jun 2024 – Present

Open-Source Developer & Contributor

- Collaborate with a cross-functional team in the development of an open-source web application partnered with the LA Department of Transportation, facilitating city's planners in achieving their Mobility Plan 2035 goals
- Developed "snapshot sharing" feature that allows users to grant view access of previous calculation results, utilizing **JavaScript** and **Express.js** for building API and **MS SQL** for database procedures, improving overall collaboration
- Enhanced User Interface and User Experience (UI/UX) by revamping **React** Components, clarifying user app navigation elements and improving accessibility

INDEPENDENT PROJECTS

Crossroads | *iOS social app connecting users using real-time location and peer-to-peer connections*

- Utilized **Swift**, **SwiftUI**, **Firebase** and Multipeer Framework in development of security measures includes such as authentication & cryptographical randomness to mitigate malicious network attacks

Quotetaking | *iOS app enabling users to conveniently save and share quotes from books*

[GitHub](#)

- Devised an image-to-quote feature that extracts and saves text from photos as a quote, integrating Vision framework's OCR technology with **Swift** and **SwiftUI**, enabling accessibility for physical book readers
- Optimized app performance and memory usage by implementing a lazy loading mechanism to loading quotes from **Core Data** storage, enhancing overall app responsiveness and user experience

TECHNICAL SKILLS

Languages: Java, TypeScript, JavaScript, PostgreSQL, MS SQL, Swift, Python, Golang, Objective-C, Haskell

Tools and Platforms: AWS, Git, NoSQL, MongoDB, DynamoDB, Docker, Redis

Libraries and Frameworks: SwiftUI, Java Spring Boot, React, Core Data

EDUCATION

York University

Bachelor of Science in Computer Science

Toronto, ON

HOBBIES & INTERESTS

Philosophy, Literature, Languages, Guitar & Piano, Fitness, Hiking, Traveling, Motorcycles & Cars, Fashion, Gaming