

Brashan Mohanakumar

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Skills

Languages	Swift, TypeScript, JavaScript, Python, C++, HTML, CSS, GraphQL, SQL, Objective-C
Mobile Technologies	SwiftUI, UIKit, XCTest, AVFoundation, Core Data, Combine, RxSwift, SwiftData
Web Technologies	Angular, React, Express, Node.js, Redux, Jest, Cypress
Tools	Git, Firebase, MongoDB, AWS, Azure, Postman, Docker, Jira, Figma, XCode

Projects

Mount Progress (Mobile App)



- Created a fitness app with Swift & SwiftUI enabling users to capture and share daily progress photos, track weight changes, and make personal notes, revolutionizing the way people document and achieve their fitness goals
- Integrated user authentication with Firebase Auth, linking Firebase Storage & Cloud Firestore for photo & data management
- Implemented unit testing protocols with XCTest, leading to a notable **20% reduction** in app crashes following release
- Successfully launched app on the Apple App Store with **50+ users** and an overall app store rating of **5/5 stars**

Abelese (Mobile App)



- Developed an iOS app leveraging Swift & SwiftUI for real-time translation of The Weeknd's songs, enhancing global access to his music
- Utilized Cloud Firestore to store **100+ songs** by The Weeknd, seamlessly connecting them to the app through the Firebase SDK
- Integrated the LibreTranslate API for real-time translation of The Weeknd's lyrics into **30+ languages**
- Implemented the MVVM architectural pattern for enhanced code organization and maintainability

Date Night (Mobile App)



- Built an iOS app for discovering **100+** of Toronto's local cafes, parks, & recreational spots, with a dynamic look-around feature
- Utilized Swift, SwiftUI, & MapKit to seamlessly integrate interactive mapping, location-based services, and immersive 3D visualizations
- Leveraged the Yelp API to integrate business listings & reviews, enhancing user experience with location-based content
- Implemented the MVC architectural pattern to improve code organization and maintainability

Experience

Full Stack Developer (Freelance), TTD-Kicks | Remote

Sep. 2022 – Aug. 2023

- Led the end-to-end creation of a high-yielding online marketplace specializing in sneakers, apparel, and technology, driving **\$70,000+** in yearly revenue and attracting **350+ customers**
- Crafted a responsive user interface with React and TypeScript, enhancing user engagement for a seamless purchasing experience
- Designed a back-end infrastructure using Node.js, Express, and MongoDB managing inventory data
- Leveraged Cypress to conduct End-to-End (E2E) testing to ensure a quality and reliable application

Software Developer Co-op, TutorBright | Toronto, ON

Jan 2023 – Apr. 2023

- Spearheaded the development of centralized resource and program hubs for **21,000+ students and tutors**, providing accessibility to exams, homework, tests, textbooks, and more leveraging Angular, Node.js, and Express
- Improved file retrieval efficiency by transitioning from bulk loading to a lazy loading strategy, resulting in faster data retrieval and processing
- Managed GraphQL layers to retrieve and update user interactions with MongoDB database
- Created thorough test suites with Jest, Cypress, and Postman, covering functional, unit, and integration testing

Data Analyst Co-op, Ace Beverage Group Inc | Toronto, ON

May 2022 – Aug. 2022

- Designed and implemented a company-wide solution to automate sales data pulls using Python, NumPy, Pandas, and Selenium resulting in significant time savings and increased accuracy
- Collaborated cross-functionally with sales and operations teams to identify pain points and develop tailored software solutions
- Automated **15+ weekly tasks** with Python scripts, saving employees **4-6 hours** weekly through optimized data processes

Education

University of Waterloo

Waterloo, ON

Bachelor of Computer Science (Co-op)

Sep. 2021 - Apr. 2025

Courses: Data Structures, Algorithms, Object-Oriented Software Development, Operating Systems, Computer Organization & Design