Yashvardhan Mulki

Software Engineering Student

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https://github.com/yashmulki

SKILLS

Languages: Swift, Java, Dart, Javascript (Intermediate), C/C++ (Intermediate), Python (Intermediate), R (Beginner)
Platforms & Technologies: MacOS, Linux/UNIX, UIKit, SwiftUI, Flutter, Aqueduct, Node.js (Intermediate), Keras (Intermediate), MongoDB, GCP/AWS, Git, Arduino, Dialogflow, Adobe Photoshop, Sketch

EXPERIENCE

Beacon Labs, Co-Founder | Oakville, ON   *June 2020 - Present*
- Early stage startup building a transformative email experience powered by deep learning
- Currently building an iOS application with SwiftUI and a deep learning system with Python (Keras)
- Received a grant ($11k in cash and hosting credits) from 1517, a seed capital fund

Tulip Retail, *iOS Developer Intern* | Toronto, ON   *July 2019*
- Worked with Tulip's executive team to identify improvements in Tulip's API and authentication system
- Used the Flutter cross-platform mobile development SDK to build Tulip's first cross-platform app
- Built an API client with access to core functionality for Tulip's system with Swift
- Extended the AppAuth library to build a client for Tulip's OAuth 2.0 based authentication system

Tulip Retail, *Checkout Team - iOS Developer Intern* | Toronto, ON   *August 2018*
- Worked on debugging Tulip's core product, an iOS application used by retailers to manage in-store interactions (written in Objective-C and Swift) and on improving the app's checkout module
- Developed a layout system for Tulip's catalog module and created a web-based interface to generate layouts
- Worked on refinements for Tulip's "Runner" iPhone app and associated watchOS app (written with RxSwift)

EDUCATION

University of Waterloo, B.S.E. Software Engineering, Honours   *Incoming, (Sep 2020-2025)*
- **Schulich Leader**: Awarded the $100,000 Schulich Leader Scholarship, Canada's largest and most prestigious merit based undergraduate STEM scholarship
- **President's Scholarship with Distinction**: Entrance scholarship for 97% admissions average

AWARDS

- **Apple WWDC Scholarship** (2017, 2018, 2019): Recognized by Apple as one of 350 WWDC scholars selected from high schools and universities across the world to attend the Worldwide Developers Conference based on a submission coded in Swift. Press coverage: https://bit.ly/2VQLFKt, https://bit.ly/2ZQISkp, https://bit.ly/2Y3vGXO
- **Apple Swift Student Challenge** (2020): Selected as one of 350 Swift Student Challenge winners from across the world based on Swift programming ability
- **Hack the Northeast Machine Learning Prize & 1517 Prize**: Built a machine learning powered "digital secretary" that automates scheduling based on an intelligent TFLite model that predicts the best time to schedule a given task
- **DECA ICDC**: Placed 3rd at the international level for Entrepreneurship in the DECA business competition

MAJOR PROJECTS

- **Quantum Computer Simulator (C++)**: Currently developing a quantum circuit builder to better understand how quantum computers work. Implemented linear algebra functions such as Kronecker product, matrix multiplication etc.
- **Options Trading Bot (Python)**: Built an options trading bot that uses a combination of user sentiment and the Black Scholes option pricing model to trade options on a variety of individual US stocks.
- **Canada Votes & Votisor (Swift, Flutter) – 2018, 2019**: Developed two apps (in Flutter/Dart and Swift) aimed at improving voter engagement in Canadian elections through the provision of information on candidates, upcoming elections, representatives and more. Press coverage https://bit.ly/2KMDtag. Received 5000+ downloads. Also developed a data aggregation API using Aqueduct and MongoDB to scrape and collate political information & news.
- **Cognito (Flutter, Node.js) – 2020**: Developed a web based education platform that lets users compile, view and share courses comprised of the best educational videos from across the internet. https://cognitobeta.netlify.app
- **Other iOS Apps (Swift):** Developed Scoretrak (2016), a score-tracking app for games, and TestPlanner (2018), a standardized test planning tool, and received ~3000 downloads cumulatively.