

# Samer Khatib

samerkhatib.com  
(630) 649-9306  
samer@samerkhatib.com

## EDUCATION

### University of Florida

**GPA: 3.87 / 4.00** B.S. in Computer Engineering

**Involvement:** Association for Computing Machinery, Software Engineering Club, Competitive Programming Club, Solar Gators, Google Student Development Club

Gainesville, FL  
Expected Graduation: May 2025

## SKILLS

**Languages:** C++, Python, Java, JavaScript / TypeScript, HTML5, CSS3, Dart, Go, Ruby, SQL

**Tools:** Flutter, ReactJS, Angular, Git, Docker, Kubernetes, DynamoDB, Redis, npm, pip

## EXPERIENCE

### Chime Financial, Inc. – Software Engineering Intern – *Experimentation Platform Team*

May 2024 – August 2024

- Built a *Statistical Power Calculator* by leveraging an **AWS Lambda Function** that executes a Power Analysis through a **Python Script** to query a **Snowflake Database** & compute Statistical Power, Sample Size, Significance Level (alpha), & Expected Effect Size of an experiment
- Optimized a **Golang Program** by implementing multi-threaded computing techniques & algorithms for an *API endpoint* at scale
- Deployed autoscaling **Kubernetes Pods** to host a stateful **Amazon SQS** subscriber that stores internal bucketing event messages sent by an **Amazon SNS** publisher into a **Redis Cache** when a user is bucketed into an experimental variant

### Cisco Meraki – Software Engineering Intern – *vMX & MR Dashboard Teams*

May – August 2023 & May – August 2022

- Created a new *API endpoint* using **Ruby on Rails** to download binary device blobs & configure device characteristics of a Wireless Access Point by converting rows from a **PostgreSQL** database into a **Comma Separated Value (CSV)** format
- Developed a **Go Package** to format the output of the command-line tool to optionally output in an **ASCII Tabular format** or *serialized JSON*
- Designed & Built a **Hashicorp Terraform** Provider to access the **Meraki Dashboard** using the *Terraform Plugin Framework* to simplify the deployment of **vMX Devices**

### DigiConnect LLC. – Software Engineering Intern – *Front End Infrastructure Team*

May 2021 – August 2021

- Launched *native* third-party client application for several social networking sites using **Swift (iOS)** & **Java (Android)**
- Migrated native application code base into a shared language (*Dart*) using Google's **Flutter** Software Development Kit
- Overhauled Website UI using **ReactJS** for graphical adjustments with a data pipeline built on **Apache Spark** & **Firebase**

## PROJECTS @ ([www.github.com/skhatib07](https://www.github.com/skhatib07))

### VaccinApp – COVID-19 Vaccine Site Locator

**C++, Python, JavaScript**

- Finds nearest vaccine locations to the user using the user's current GPS coordinates & displays them on a map
- Retrieves vaccination site metadata from The *Socrata Open Data API* & current location from the *HTML Geolocation API*
- Collects historical data on previous vaccination queries in **JSON** format, sorting the data using a **DynamoDB** table

### YOLO-ALPR – Automatic License Plate Detection & Recognition

**Python, C++, pip**

- Detects & isolates a vehicle & vehicle's license plate in a live video stream using **Ultralytics YOLOv11** architecture
- Analyzes detected vehicle to identify physical characteristics of the vehicle (color, make, model)
- Reads & saves license plate number using **Amazon's Textract** optical character recognition (OCR) engine
- Stores plate image bitstream data in an Amazon **AWS RDS** database as a **PostgreSQL** column

### Myoelectrics – Natural Robotic Hand & Actuation

**Python, Java, C++**

- Takes raw inputs from forearm muscles of user by processing raw data from 8 independent *electromyography (EMG)* sensors
- Raw inputs are passed through & filtered using Weka3's **Sequential Minimal Optimization (SMO)** regression
- Degree of finger actuation is identified after filtration using a *Recurrent Neural Network Classifier* with **Google's Tensorflow**

## AWARDS

### Intel Excellence in Computer Science Award

March 2019, February 2020

Awarded to top student project in the Computer Science Category at the Florida State Science and Engineering Fair

### Regeneron Science to Medicine Certificate of Recognition

March 2019

Presented to student with research improving modern medical technology at Florida State Science and Engineering Fair