

Kareem Arab

me@kareemarab.com

Ottawa, Canada

kareemarab.com

languages, frameworks and technologies **SWIFT — JAVA — PYTHON — TYPESCRIPT — SQL — HTML/(S)CSSs**
iOS, iPadOS, XCODE, REALM, SERVERLESS (AWS LAMBDA/GCP FUNCTIONS) — GCP
— AWS — K8s — HELM — DOCKER — VAULT — CI/CD (XCODE CLOUD, GITHUB AC-
TIONS, JENKINS, SPINNAKER) — TENSORFLOW — SPRINGBOOT — MYSQL — REDIS —
DYNAMODB — IONIC — FIREBASE — RANCHER — SPLUNK — LATEX

work experience **AMADEUS**

Full Stack Engineer

Mar 2021 - present

- Developed and integrated **Multi-Factor Authentication (MFA)** into our existing authentication service, enhancing account security for millions of users.
- Developed and executed multiple service deployments to Rancher K8s and caching, resulting in self-healing deployments, increased capacity and reduced database load.
- Responsibility over system components & onboarding of new engineers.
- Designed and developed internal tools (user-management, code-review listing, etc.) that help developers in their development process.

NEUROVINE

Apr 2019 - Feb 2021

Software Engineer

- Shipped **APIs** built on **AWS Lambda** (serverless) that drove our mobile and research portal apps. It also drove our internal data-science pipeline.
- Developed a consumer mobile app & research portal using **Ionic**.
- Collaborated w/ Data Science team to build a **Python real-time** EEG analysis system.
- Helped implement **HIPPA** requirements across our systems.

education CARLETON UNIVERSITY

Spring 2020

Bachelor of Computer Science (BSc)

projects HANDSHAKE – iOS App

2018

- Private real-time group chat w/ built-in event management - beta. Built using **Swift**, **Firebase**, **Google Cloud Functions**, **Cloud Scheduler** and **Realm DB**.

TRND

2018

- A social network app for GIFs. Built using **Swift** and **Parse**.

GUASSIAN/CARLINI-WAGNER ADVERSARIAL ATTACKS

Winter 2020

- Comparing the effects of Gaussian and Adversarial Perturbations on a convolutional neural network's input space.

NEURAL NETWORKS

Summer 2020

- A collection of different Implementations of neural networks (Hopfield, RBF and Convolutional) built using **TensorFlow**.

** More **projects** on *github*.

achievements SHOPIFY — BUILD THINGS APP AWARD

Nov 2018

Winner of the best App award @ Shopify's Build Things App Showcase.

research IoT LAB @ CARLETON UNIVERSITY

2017 - 2019

Undergraduate Researcher

- Researched the best performing inference techniques on Smart Grid energy data.
- Built real-time multi-modal data streaming system using a Raspberry-pi and IBM Cloud.

DIABETES COACH (MACADAMIAN—IOT LAB)

Winter 2018

- Helped build a system that aims to improve the lives of type II diabetes patients through self-management using voice control and real-time feedback.

publications ** All publications on *google scholar*.