Kareem Arab

me@kareemarab.com
Ottawa, Canada
kareemarab.com

languages, frameworks and technologies

SWIFT — JAVA — PYTHON — TYPESCRIPT — SQL — HTML/(S)CSSss
SERVERLESS (AWS LAMBDA/GCP FUNCTIONS) — GCP — AWS — AZURE — K8S — HELM — DOCKER — TERRAFORM — VAULT — CI/CD (GITHUB ACTIONS, JENKINS, SPINNAKR) — IOS — TENSORFLOW — MYSQL — REDIS — DYNAMODB — IONIC (ANGULAR) — FIREBASE — REALM — NEXTJS — LATEX

work experience

AMADEUS — *Mar 2021 - present*
Full Stack Engineer
- Involved in designing, building and integrating **Multi-Factor Authentication (MFA)** into multiple production systems.
- Aided in the design, development and testing of internal tools (user-management, code-review listing, etc.) that help other developers in their development proocess.

NEUROVINE — *Apr 2019 - Feb 2021*
Software Engineer
- Built **APIs** w/ **AWS Lambda** that provide functionality to multiple apps
- Helped develop a consumer mobile app & research portal using the **Ionic (Angular)**
- Collaborated w/ Data Science team to build a **Python real-time** EEG analysis system
- Helped set up an integration system using **PIP** that allows the data-science team to develop their algos. independently and update the respective APIs automatically
- Helped implement **HIPPA** requirements across all our systems

education

CARLETON UNIVERSITY — *Spring 2020*
Bachelor of Computer Science (BSc)

projects

HANDSHAKE — *2018*
- Private events iOS app - beta. Built using **Swift**, **Firebase**, **Google Cloud Functions** and **Realm DB**

TRND — *2018*
- A social network app for GIFs. Also 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***.

research

IOT LAB @ CARLETON UNIVERSITY — *2017 - 2019*
Undergraduate Researcher
- Helped research the best performing inference techniques on Smart Grid energy data
- Learned to work w/ **Neural Networks** and **Wireless Sensor Communications**

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

AI FOR DIABETES MELLITUS TYPE II: FORECASTING AND ANOMALY DETECTION — *2019*
Author — IEEE Wireless Communications and Networking Conference

DATA COMMUNICATION AND ANALYTICS FOR SMART GRID SYSTEMS — *2018*
Co-author — IEEE International Conference on Communications

achievements

SHOPIFY — BUILD THINGS APP AWARD — *Nov 2018*
Winner of the best App award @ Shopify's Build Things App Showcase