

Kareem Arab

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Ottawa, Canada

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languages, frameworks and technologies SWIFT — PYTHON — TYPESCRIPT — HTML/(S)CSS/ — C++
XCODE — IOS — TENSORFLOW — AWS LAMBDA/SERVERLESS — REST — GIT — CI/CD
— GOOGLE CLOUD FUNCTIONS — LINUX — IONIC (ANGULAR) — FIREBASE — FIRE-
STORE — PARSE — REALM — NEXTJS — DYNAMODB — VERCEL — MATHJAX — LATEX

work experience **NEUROVINE** *Apr 2019 - present*
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 **HIPAA** requirements across all our systems

CARLETON UNIVERSITY POSTDOCTORAL UNION Winter 2018
Web Developer

- Developed website for the Carleton University Postdoctoral Union using **Laravel (PHP)** along with an administrative dashboard to control posts and events

education	CARLETON UNIVERSITY Bachelor of Computer Science (BSc)	<i>Spring 2020</i>
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projects **HANDSHAKE — *Proprietary*** 2018

- Private events iOS app - alpha release soon. 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**

GLANCE 2018

- **Linux OS** Task Manager written in Python

** 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 <i>Winner of the best App award @ Shopify's Build Things App Showcase</i>	<i>Nov 2018</i>
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