Kareem Arab

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languages, frameworks and technologies	PYTHON — SWIFT — TYPESCRIPT — HTML/(S)CSS/ — C++ TENSORFLOW — AWS LAMBDA/SERVERLESS — GIT — CI/CD (GITHUB ACTIONS) — IONIC (ANGULAR) — FIREBASE — GATSBY — PARSE — LARAVEL — REACT — NEXTJS — VUEJS — DYNAMODB

work experience

NEUROVINE — *Apr 2019 - Sep 2020*
Software Engineer
- Built **APIs** w/ **AWS Lambda** that provide functionality to multiple apps
- Helped develop a consumer mobile app as well as a research portal using the **Ionic (Angular)** cross-platform framework
- Collaborated w/ Data Science team to build a **Python** EEG analysis system that provides **real-time** feedback of cognitive over-exertion to concussion patients through an app
- 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
- Worked through the entire stack in a dynamic start-up environment
- 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 — *Spring 2020*
Bachelor of Computer Science (BSc)

projects

TRND — *2018*
- A social network app for GIFs. Built on **iOS** using **Xcode – Swift**

C&W ADVERSARIAL ATTACK — *Winter 2020*
- Comparing the effects of Gaussian and Adversarial Perturbations on a CNN's input space

NEURAL NETWORKS — *Summer 2020*
- A collection of different Implementations of neural networks (Hopfield, RBF and Convolutional) built using **TensorFlow**

GLANCE — *2018*
- **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**, **DSP** & **Wireless Sensor Communications**

DIABETES COACH (MACADAMIAN—IOT LAB) — *Winter 2018*
Research & Development Intern
- 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

achievement(s)

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