Kareem Arab

Full stack generalist me@kareemarab.com Ottawa, Canada — Remote

languages PYTHON — GO — SWIFT — TYPESCRIPT — LATEX frameworks/technologies React — NextJS — iOS — Serverless — REST APIs — Websockets — Kuberentes — CI/CD (Jenkins, Actions, etc.) — Firebase — Plaid libraries Tensorflow — UIKit — Tailwind — ReactQuery — PyTorch (elementary proficiency) cloud platforms GCP — AWS — Azure — Vercel databases MongoDB — Redis — Firestore — MySQL Kanban — Agile — Scrum processes work experience **AMADEUS** — Full Stack Engineer Mar 2021 - present - Collaborated with cross-functional teams to plan and implement the migration of our Guest Management Solutions infrastructure from **On-prem & GCP** to **Azure**. - Collaborated on the design and implementation of a new Multi-Factor Authentication (MFA) system, enhancing account security for users. - Successfully migrated multiple services to Rancher k8s with caching, resulting in selfhealing deployments and improved capacity and reduced database load for Black Friday. - Designed, built and tested highly performant **APIs**. **NEUROVINE** — Software Engineer Apr 2019 - Feb 2021 - Developed secure Serverless APIs built on AWS Lambda in Python that drove our mobile app as-well as our research and data-science pipelines. - Worked on low-level bluetooth communication software for our wearable EEG headset. - Shipped a mobile app & a research portal built w/ **Ionic**. - Worked closely with the data science team to integrate ML models into the platform. - Implemented **HIPAA** compliance requirements across our systems/designs. - Realtime financial aggregation & search — React & Go + Plaid projects present - Realtime group chat w/ built-in event management — iOS (Swift) & Serverless → 2020-2022 - Multithreaded HTTP Redis proxy w/ an LRU cache — Python → 2022 - Hopfield, RBF & Conv. neural network implementations — *Python & TensorFlow* → Summer 2020 - Analyzing Gaussian & adversarial perturbations on a CNN's latent space → Winter 2020 More projects on github. **IOT LAB @ CARLETON UNIVERSITY** 2017 - 2019 research Research assistant - Conducted research on ML applications for Smart Grid energy systems. - Built a real-time multi-modal data streaming system using a Rasp. Pi and IBM Cloud. - Published two conference papers. DIABETES COACH (MACADAMIAN—IOT LAB COLLABORATION) Winter 2018 - Type II diabetes self management tool. education **CARLETON UNIVERSITY** Spring 2020 Bachelor of Computer Science (BSc)

Nov 2018

achievements

publications

SHOPIFY — BUILD THINGS APP AWARD

** List of **Publications** on **Scholar**.

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