Kareem Arab

me@kareemarab.com Ottawa, Canada — Remote kareemarab.com

languages GO — PYTHON — SWIFT — TYPESCRIPT & JS

frameworks and technologies

iOS — NextJS — MongoDB — React — TensorFlow — Serverless — GCP — AWS — Azure — K8s — Helm — Docker — Vault — CI/CD (GH Actions, Jenkins, Spinnaker) — MySQL — Redis — DynamoDB — Ionic — Firebase — Rancher — Splunk — Latex

processes Kanban, Agile & Scrum

work experience

AMADEUS

Mar 2021 - present

Full Stack Engineer

- Help develop and integrate **Multi-Factor Authentication (MFA)** into an existing authentication service, enhancing account security for users.
- Developed and executed multiple service migration to **Rancher k8s + caching**, resulting in self-healing deployments, increased capacity and reduced database load for Black Friday (result: success/no prod issues).
- Mitigated xss attacks by developing an end-to-end reporting solution.
- Led **scrum & grooming** sessions, pushing multiple features into the development pipeline + **onboarding** new engineers.

NEUROVINE Apr 2019 - Feb 2021

Software Engineer

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

projects

PRINCIPAL

present

- **Financial management** tool for small businesses – Integrations w/ **Plaid** & **VoPay** (**EFT/ACH payments processor**). Stack: Go, React & Swift

HANDSHAKE 2020-2022

- Private real-time group chat w/ built-in event management. Stack: iOS - Swift & Serverless - Typescript

RP

2018

- A multithreaded HTTP Redis proxy server w/ an LRU cache.

GAUSSIAN—CARLINI-WAGNER ADVERSARIAL ATTACKS

- Gaussian & Adversarial Perturbations on a CNN's input space.

NEURAL NETWORKS

- A collection of neural network implementations built u/ **TensorFlow**.

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

research IOT LAB @ CARLETON UNIVERSITY

2017 - 2019

Winter 2020

Summer 2020

- Undergraduate Researcher
- Conducted research on the best ml model applications on Smart Grid energy data.
- Built a real-time multi-modal data streaming system using a Rasp. Pi & IBM Cloud.

DIABETES COACH (MACADAMIAN—IOT LAB)

Winter 2018

- Type II diabetes self management tool.

education Carleton University

Spring 2020

Bachelor of Computer Science (BSc)

achievements Shopify — Build Things App Award

Nov 2018

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

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