Kareem Arab

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PYTHON — JAVA — SWIFT — TYPESCRIPT (PRIOR EXPERIENCE) — GO (ELEMENTARY languages PROFICIENCY) frameworks and iOS — XCode — Realm — NextJS — React — Serverless — GCP — AWS — K8s — Helm technologies — Docker — Vault — CI/CD (GH Actions, Jenkins, Spinnaker) — TensorFlow — MySQL — Redis — DynamoDB — Ionic — Firebase — Rancher — Splunk — Latex Kanban, Agile & Scrum processes 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. Worked w/ a hybrid system architecture (on-prem servers & GCP) **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. education **CARLETON UNIVERSITY** Spring 2020 Bachelor of Computer Science (BSc) HANDSHAKE projects present - Private real-time group chat w/ built-in event management - beta. Built using Swift, Firebase, Google Cloud Functions, Cloud Scheduler and Realm DB. 2018 - A multithreaded HTTP Redis proxy server w/ an LRU cache. Winter 2020 **GUASSIAN/CARLINI-WAGNER ADVERSARIAL ATTACKS** - Gaussian & Adversarial Perturbations on a CNN's input space. **NEURAL NETWORKS** Summer 2020 - A collection of different Implementations of neural networks built using TensorFlow. ** More **projects** on **github**. IOT LAB @ CARLETON UNIVERSITY 2017 - 2019 research 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. achievements SHOPIFY — BUILD THINGS APP AWARD Nov 2018 Winner of the best App award @ Shopify's Build Things App Showcase. AI FOR DIABETES MELLITUS TYPE II: FORECASTING AND ANOMALY DETECTION publications 2019 Author — IEEE Wireless Communications and Networking Conference

DATA COMMUNICATION AND ANALYTICS FOR SMART GRID SYSTEMS

Co-author — IEEE International Conference on Communications

2018