MICHAEL KHA

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SKILLS

Backend: C#, Java, Python, C/C++, Ruby, Bash, SQL (MySQL, PostgreSQL), NoSQL (MongoDB, DynamoDB, Cassandra, Redis, Firebase), ORM, cloud providers (AWS, Azure, GCP), deployment (Docker, Kubernetes, Terraform, Ansible), CDN, DNS
Frontend: JavaScript, TypeScript, React, Redux, Next.js, Jest, REST, GraphQL, CSS, Sass, CORS, JWT, OAuth, WebSockets
Engineering: unit testing, VCS (Git, SVN), microservices, serverless, CI/CD (Jenkins), agile (scrum, kanban), DevOps, SDLC

WORK EXPERIENCE

Software Developer ♀ *Epic Systems – Madison, WI*   06/2021 - Present
Health management system hosted at major US hospitals, serving over 300 million patient records globally.
>_ **Tools**: *.NET/C#, VB, IIS, RPC, TypeScript, React, Redux, jQuery, Sass, WCAG, MySQL, NoSQL, I18N, OWASP*
– Delivered projects to enhance the functionality between core applications with different userbases, patients and providers
– Mentored junior engineers in an ever-growing team owning several cross-functional areas and endpoints
>_ **MyChart**: *Developed accessible and internationalized features in messaging, notifications, payments, and documents*
– Reworked client state and caching to boost the performance of validating addresses and accuracy of location data
– Revamped core e-signature UI library to improve usability by refactoring React component props to decouple shared state
>_ **Hyperspace**: *Integrated enhancements for several cross-functional services during Chromium app migration*
– Joined initiative to leverage GPT and categorization for providers to respond faster to hundreds of patient messages daily

Software Engineer Intern ♀ *IOMAXIS – Hybrid - Arlington, VA*   01/2020 - 08/2020
Government contracting firm developing innovative cloud and cyber security solutions.
>_ **Tools**: *Python, Flask, Rust, React, Bootstrap, SQLite, AWS, GCP, Azure, Docker, Ansible, Kubernetes, Terraform, Vagrant*
>_ **VPN Tunnel**: *Automated provisioning of multi-cloud OpenVPN SSL tunnel proof of concept to early product delivery*
– Implemented automated regional resource provisioning, OAuth 2.0, SSL encryption, unit tests, and Bamboo CI/CD builds
>_ **AI Data Streaming Platform**: *Proposed vision of cloud platform for automated AI large language model deployment*
– Deployed Kafka to stream data for pre-training BERT in anomaly detection of system logs similar to ELK stack services

Software Engineer Intern ♀ *Norfolk Southern – Atlanta, GA*   05/2019 - 08/2019
Intermodal information management team administering freight logistics data for 30% of annual revenue.
>_ **Tools**: *Java, JBoss, Python, C, Perl, JavaScript, Shell, MobileFirst, Cordova, Db2 SQL, Jenkins*
– Wrote SQL queries for data deduplication, reporting, and disaster recovery planning of production servers
– Analyzed legacy enterprise system for JBoss rewrite and migrated mobile app features during MobileFirst rework to Cordova

RELEVANT EXPERIENCE

Addletic Capstone Project   08/2020 - 05/2021
Development of a sports league management and social media platform for a customer product owner.
>_ **Tools**: *Python, Django, TypeScript, React, Bootstrap, PostgreSQL, AWS, Docker, OpenAPI, Swagger, JWT, Git*
– Implemented client using React based on customer wireframes and deployed onto AWS to deliver initial concept
– Recommended to use OpenAPI Specification to architect REST API and data model to meet business requirements

Teaching Assistant – *Software Engineering*   08/2019 - 05/2021
Assistant for graduate cloud system design seminar taught by a senior architect with the goal of AWS certification.
>_ **Topics**: *SaaS, PaaS, IaaS, distributed systems, containers, serverless, autoscaling, high availability, redundancy, DevOps*
– Advised projects from a tiered architecture proposal to implementation of AWS cloud services at a realistic scale
– Taught distributed, big data technologies like MapReduce, Hadoop, Spark, and event streaming

Lab Assistant – *Center for Detectors*   09/2019 - 12/2019
Calculated ray tracing to investigate the physical tolerances of an observatory lens for an NSF-funded project.
– Analyzed data for particle/photon detector properties by visualizing data sets into a single plot in IDL and C/C++

EDUCATION

B.Sc. in Software Engineering ♀ *Rochester Institute of Technology – Rochester, NY*   08/2017 - 05/2021
Minors: Mathematics & Computer Science