

MICHAEL KHA

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Software engineer well-versed in agile development. Communicates with product management to scope out requirements. Forward-thinker architecting systems to production capacity. Attentive to applying best practices and testing to ensure quality and maintainable software. Engineering interests in full-stack and infrastructure.

EDUCATION

B.Sc. in Software Engineering – Rochester Institute of Technology 08/2017 – 05/2021
Minors: Mathematics, Computer Science | GPA: 3.7 Cooperative Education
Extensive engineering program applying computer science to industry through projects and co-op experiences.
Extracurriculars – Mentor/Member, Society of Software Engineers • Member, RIT AI Club • Member, codeRIT

EXPERIENCE

Teaching Assistant – Rochester Institute of Technology Rochester, NY | 08/2019 – Present
– Supporting cloud design seminar with topics in architecture, virtualization, automation, DevOps, and big data
– Instruction of AWS products through blended learning alongside engineering manager at M&T Bank
– Previously assisted system design course that introduces design principles, patterns, and refactoring

AI Software Engineer Intern – IOMAXIS Remote | 05/2020 – 08/2020
➤ Kafka, Spark, Cassandra, AWS, Vagrant, Terraform, Docker, Kubernetes, Jira
– Presented MLOps infrastructure to automate processes using data pipelines and AI workflow platforms
– Proposed and architected ETL pipeline to centralize data, while automating data extraction and pre-processing
– Led flexible automated deployment of services using Vagrant, agnostic to AWS or on-premise environment
– Integrated Kubernetes for configuration, resource management, and scaling of Kafka

Cloud Software Developer Intern – IOMAXIS Arlington, VA | 01/2020 – 05/2020
➤ Python, Flask, React, SQLite, AWS, GCP, Azure, Docker, Ansible, Bamboo, Jira
– Expanded infrastructure as code solution, managing the build and integration of multi-cloud VPN tunnel
– Solved bottlenecks with major cloud providers, improving reliability of builds to near certain success
– Shipped product to customer with security features, unit testing, deployment environments, and error logging

Software Engineer Intern – Norfolk Southern Atlanta, GA | 05/2019 – 08/2019
– Implemented changes to database API, recording status of 180,000 monthly cars at terminals and on the line
– Attained insight on disaster recovery of customer-facing and internal systems impacting 30% of revenue

RECENT PROJECTS

Senior Capstone Project – Sports Management and Social Platform 🌐 staging.addletic.com
➤ Python, Django, TypeScript, React, PostgreSQL, AWS, Docker, Jira
– Development of sports league management Django and React services under direction of product owner
– Implementing client-side state management and AWS server deployment to deliver functional product

Cloud-based Microservice Orchestration 🌐 mxk5025/burger-order-microservice
➤ Ruby, Rails, React, AWS, DynamoDB, Docker
– Simulation of microservice orchestration on ECS using SQS messaging to manage and complete jobs
– Demonstrated auto-scaling of services triggered by SQS request traffic using CloudWatch metrics

SKILLS

Programming Technologies: Python, Java, C/C++, JavaScript, React, SQL, NoSQL, AWS, GCP, Azure
Design: System Design, Distributed Systems/Microservices, Data Modeling, Security, Cloud Architecture
DevOps: Git, Docker, Kubernetes, CloudFormation, Terraform, Ansible, Vagrant, Shell Provisioning, CI/CD