Avoids Layoffs

United States linkedin.com/in/   github.com/

IMPETUS

A research-oriented Architecture First Software Engineer with deep specialization in data-intensive Kubernetes microservices written in python.

SKILLS

Languages: Python(3.11), SQL, JavaScript, Bash

Platforms and Services: Kubernetes, AWS-(EC2, ECS, CloudFormation, Lambda, CodeArtifact), GCP-(GKE, Cloud Functions, Cloud Run, App Engine, Vertex), Netlify, Heroku, Auth0, ChatGPT, Raspberry Pi

Tools and Infrastructure: GitHub Actions, Terraform, Helm, ArgoCD, Telepresence, buildx, Kafka, Docker, pre-commit, Ansible

Frameworks: FastAPI, Flask, Django, Pydantic, Pandas, Pytest, Coverage, SQLalchemy, Node.js

EXPERIENCE

Senior Software Engineer

Torqata   **February 2022 - Present, Charolette, NC**

· Architected & implemented GKE-based Kubernetes microservices for scaleable, inbound & outbound ETL pipelines.

· Introduced provenance sub-service to monitor pipeline health, reducing data loss triage time by 62%.

· Conceptualized, evangelized, and executed org-wide OKR to migrate from Flask to FastAPI for REST-based microservices. Reduced churn by 48%.

· Mentored engineers and managers of all skill levels in XP, SDLC, and agile paradigms.

Software Engineer

OneOme   **February 2020 - February 2022, Minneapolis, Minnesota**

· Involved in various projects involving engineering, implementation, and improvement of internal and patient/provider-facing systems

· Acted as an intermediary and translator between the software development team and diverse project stakeholders during outbound integration projects.

· Migrated codebase from Bitbucket to Github.

· Supported process improvement and R&D initiatives that yielded increased productivity across the development team.

· Acted as point-of-contact during the onboarding of a completely new team.

Software Engineer

Minnesota Traffic Observatory   **March 2016 - February 2020, Minneapolis, MN**

· Administered over various critical remote Raspberry Pi based data collection and on-premise lab systems.

· Actively contributed to the publication of 2 academic research papers.

· Conceptualized and built a novel Smart Work Zone management system.

· Managed and mentored a team of Computer Science Undergrad students.

EDUCATION

Master's of Science: Software Engineering

University of Minnesota · Minneapolis, MN

Bachelor of Arts: Computer Science

Luther College · Decorah, IA

PROJECTS (ABR.)

Integrations implementation and management

Torqata & OneOme

· Collaborated with various teams to enable integration between in-house data and external systems

· Engineered and implemented bespoke integrations between OneOme and various healthcare institutions.

· Sustained 99.9% uptime for integrations that handle 41% of total order volume between internal systems and external customers.

Cloud Infrastructure implementation and maintenance
Torqata & OneOme
· Developed and deployed container and task based web and data driven applications to GCP, AWS and Heroku from scratch.
· Maintained, patched, and improved existing cloud-native applications.
· Discovered, vetted, and evangelized new technologies for use by development teams across both organizations.

PGx Score
OneOme
· Collaborated with OneOme's data science team to build a cloud-native patient population scoring and stratification ETL Pipeline.
· Optimized system by translating prototype from R to Python, resulting in 238% speed increase.
· Authored comprehensive Software Requirements Specification document for system.

Linux based sensor data collection
MTO
· Developed software to gather and transmit video, radar, and induction-loop based data based on a user defined schedule.
· Deployed and maintained raspbian and debian based systems utilizing this software.
· Ensured uptime during Minnesota Winters.

Publications
· Structural Pattern Matching (talk): https://github.com/aloutfi/pmatch_pymntos.
· Stop Lines Effectiveness and Impact (paper): https://conservancy.umn.edu/handle/11299/216514.
· Statewide Work Zone Information System (paper): https://conservancy.umn.edu/handle/11299/208582.