# Harsha Kalyan

Senior Software Engineer, Infrastructure

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Senior Software Engineer with over 3 years of experience in Software Development, excelling in Programming Languages, Testing, Software Design, and Architecture. Experienced in Technical Leadership and Troubleshooting. Proficient in Scalable Solutions, RESTful Services, Kubernetes, Google Cloud, Solutions Architecture, Networking, and Security.

#### **Skills**

Container Orchestration: Kubernetes, Docker, Helm
Infrastructure as Code: Terraform, Pulumi
Monitoring and Logging: Prometheus, Grafana

• CI/CD: Jenkins, GitLab, CircleCI • Scripting: Bash, Python

Cloud/ virtualization: AWS, GCP
Programming Languages: Python, JavaScript, Go
Messaging Systems: Kafka
Version Control: Git, GitLab, GitHub
Agile Methodologies: Scrum, JIRA
Configuration Management: Ansible

# **Experience**

## Senior DevOps Engineer Ubiety Technology Inc. | Chicago, Illinois

July 2020 - Present

- Led cross-account Kubernetes implementation on GKE and orchestrated CI/CD setup, achieving seamless Kubernetes deployment and CI/CD integration across accounts.
- Strategically transformed AWS account structure, partitioning into three accounts and executing seamless data migration, resulting in efficient data transition and enhanced account performance.
- Empowered robust security by migrating sensitive credentials to HashiCorp Vault, integrating with GitLab CI for fortified security measures and reliable CI/CD pipelines.
- Pioneered cost-effective monitoring with a consolidated Grafana dashboard aggregating metrics, yielding annual cost savings of \$10,000 and reducing incident response time by 40%.
- Contributed to architecture reviews by providing valuable insights and prioritizing scalability, performance, and security considerations, leading to optimized system architectures aligned with business goals.

#### DevOps Engineer Ubiety Technology Inc. | Chicago, Illinois

June 2021 - June 2023

- Directed the development of reusable Terraform modules for AWS services, standardizing infrastructure components for heightened maintainability and version control, resulting in 50% faster infrastructure updates.
- Guided transition from monolith to agile microservices architecture via Kafka consumer model on ECS, reducing operational complexities by 40% and improving response times by 30%.
- Innovated cost-effective CI/CD enhancement through custom GitLab runners with AWS Spot instances, achieving an 80% cost reduction while maintaining high-performance standards.
- Implemented an optimized internal access solution through a dedicated CLI tool and fortified private bastion utilizing AWS SSM, resulting in a decrease of unauthorized access incidents and enhancing operational efficiency by 40%
- Drove streamlined load testing and QA automation by developing automated scripts with K6, validating system performance across diverse workloads, and automating QA procedures, leading to a 50% reduction in testing duration.
- Enhanced team efficiency through comprehensive training in Agile and DevOps principles, resulting in streamlined workflows and faster development cycles.

#### Cloud Architect BitOGenius | New York City, NY

Jan 2021 - May 2021

- · Configured fault-tolerant Cassandra clusters, ensuring robustness and reliability, resulting in uninterrupted gaming services.
- Enhanced user experience in gaming scenarios by optimizing Cassandra and Redis, ensuring smoother interactions and reduced latency.
- Introduced Go Lang for cloud apps, significantly improving performance and resource utilization for efficient microservices on EC2.

#### **Education**

Master of Science in Computer Systems, Northeastern University | Boston, MA

Courses: Data Structures and Algorithms

Bachelor of Science in Electronics and Communications,

SRM University | Chennai, TamilNadu, India

Graduated Dec 2020

GPA: 3.5/4

**GPA: 3.6/4** Graduated May 2018

### **Certifications**

• Certified Kubernetes Application Developer (CKAD)