

# JOY MUGAO

## Software Engineer | Systems Architect

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| [LINKEDIN](#) | [GITHUB](#)

### SUMMARY

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Software DevOps Engineer with more than 2yrs hands-on experience designing secure architectures, building multi-account environments, and automating infrastructure for enterprise-scale platforms serving 10K+ users. Skilled in AWS Organizations, Identity Center, VPC networking, and infrastructure automation using Terraform, Kubernetes, and CI/CD pipelines. Proven ability to drive cloud cost optimization, high availability, and developer productivity. KCNA Certified.

### SKILLS

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- **Programming Languages:** Python, JavaScript, ,Golang HTML, CSS, C#, Bash/Shell Scripting
  - **Frontend:** React, Next.js, Bootstrap, Tailwind
  - **Backend:** ,AngularJS ,Node.js, Express.js, Flask, .NET,Django
  - **Databases:** MySQL, MongoDB
  - **Tools:** Git,
- **Cloud & Infrastructure :** AWS (EC2, Lambda, S3, RDS), Google Cloud Platform, Kubernetes, Docker, Terraform, Ansible  
AWS Organizations, IAM, Identity Center (SSO), VPC Design, Routing, Security Groups, EC2, RDS PostgreSQL, S3, Lambda, CloudWatch, CloudTrail, ALB/NLB, Multi-account architectures, Environment separation, DR/Backups
- **DevOps & Tools :** Jenkins, GitHub Actions, GitLab CI/CD, Azure DevOps Prometheus, Grafana, ELK Stack ,Terraform . Ansible
- **Architecture:** Microservices, Event-Driven Systems, Distributed Systems, RESTful APIs System Design
- **FinOps:** Cost allocation, Budgets, Cost visibility dashboards, Resource optimization

### EXPERIENCE

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#### Software Engineer | Enkaare

**Aug 2024 – Present | Remote, Baltimore, MD**

**Enterprise HR platform and blockchain subsidiary serving 100K+ users.**

- Architecting and developing two full-stack applications (Enkaare HR and Black Panther Token) from scratch using React, Node.js, and MongoDB, delivering MVPs in 8 weeks serving 5K+ concurrent users.
- Migrating legacy monolith to microservices; improved deployment velocity by 10x and achieved 99.99% uptime with p99 latency under 200ms.
- Implementing Kubernetes auto-scaling and distributing caching reducing database load by 60% and infrastructure costs by 40%.
- Designing CI/CD pipelines (Jenkins, Docker, GitHub Actions) enabling 50+ deployments/week with 75% fewer production incidents.

- Collaborating cross-functionally to deliver a payment automation system reducing transaction processing time by 80%, driving \$100K in enterprise deals.  
Key Achievement: Reduced operational costs by 40% while scaling to 10K+ active users.

## Software Quality Assurance Engineer | Enkaare

Apr 2024 – Jul 2024 | Baltimore, MD

*Established quality engineering foundation for rapidly scaling startup.*

- Built automated test frameworks achieving 80% code coverage; caught 95% of bugs pre-production.
- Conducted performance testing using JMeter, improving system capacity 5x and API reliability by 20%.
- Integrated test suites into CI/CD pipeline, reducing post-deployment bugs by 20%.
- Facilitated QA knowledge transfer, reducing testing bottlenecks by 40%.

## PROJECTS

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[View my Portfolio](#)

## EDUCATION

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**Kenyatta University (2017 – 2023)**

BSc Industrial Chemistry

**Cyber Shujaa (2025)**

Cloud and Network Security

**Certifications:**

- **Linux Foundation, 2024**  
[Kubernetes & Cloud Native Associate \(KCNA\)](#)  
[LFS250: Kubernetes and Cloud Native Essentials Certificate](#)  
[LFS158: Introduction to Kubernetes](#)
- **DevOps Engineering Certificate — Moringa School, 2024**  
[Verify Certificate](#)
- **JavaScript RAG Web Apps — DeepLearning.AI, 2024**  
[Verify Certificate](#)
- **Software Engineering Certificate \_\_ Zindua Coding School 2023**

## VOLUNTEER EXPERIENCE

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- Google Top 40 Women in Software Engineering Kenya 2024 — Recognized for innovation in distributed systems.
- Technical Coordinator | Tech Sisters Kenya — Lead 50+ engineers in workshops on cloud-native architectures.
- Technical Writing & Mentorship — Published technical blogs on medium; led 5+ deep dives on kubernetes adoption.  
[🔗 Medium Profile](#)