

ZOKCHEN TAMANG

DevOps Engineer II

Kathmandu, Nepal • (+977) 9813643643 • zokchentamang7@gmail.com
github.com/Zokchen • linkedin.com/in/zokchen

PROFESSIONAL SUMMARY

Off the clock you'll find me chasing a personal best on a run or grabbing boards on the basketball court, and on the job I bring the same drive to building, running, and keeping infrastructure alive under pressure. Linux administration and networking are where I'm strongest: hardening servers, tuning DNS/SSL, and keeping traffic secure and fast. I deploy and maintain a wide range of stacks, including Python/Django, PHP/Laravel, Node.js, React, Angular, and Odoo, backed by PostgreSQL, MySQL, and Windows Server databases, all watched over by a Prometheus, Loki, and Grafana observability stack I built myself. I stood up a K3s cluster from scratch and layered in Vault for secrets and ArgoCD for GitOps, and I like passing that knowledge on: I've mentored junior engineers along the way. Reliability isn't a checkbox for me, it's the win condition.

CORE SKILLS

Linux & Networking: Linux server administration, UFW firewalls, DNS, SSL/TLS, Cloudflare, reverse proxy routing, performance tuning

Observability & Logging: Grafana, Prometheus, Loki, Promtail, Elastic Stack (Elasticsearch & Kibana 8.x/9.x)

Cloud (AWS): EC2, S3, Route 53, EBS, EFS — architected and hosted a client subscription service at ~\$30/month

Containers & Orchestration: Docker 23.0.5, Docker Compose v2.17.3, Kubernetes (K3s v1.32.6, Kustomize v5.5.0), Longhorn (persistent storage), Portainer, Komodo

GitOps & Secrets: ArgoCD managing 8 services via monorepo, webhook-triggered GitOps deployments with custom Helm charts and Traefik DNS-based domain routing; HashiCorp Vault (KV engine) for centralized secrets with per-developer, per-environment access control

CI/CD & Automation: GitLab CI, GitHub Actions, Harbor (private registry with image scanning & vulnerability checks), automated build / test / deploy

Scripting & Automation: Bash scripting for Loki log parsing by service, server hardening scripts, and 25+ cron jobs automating backups (rclone sync to cloud storage), Docker pruning, and Elasticsearch snapshots — cut manual backup time from 2-3 days to a scheduled job

Web Servers & Proxy: NGINX, NGINX Proxy Manager, Caddy, Apache

Databases: PostgreSQL (15, 16, 18), MySQL, and SQL Server (Windows Server) across DEV/INT/PROD for all application stacks and Odoo

Application Stacks (deploy): Python/Django (Celery, Celery Beat, Redis, RabbitMQ, Flower), Node.js, PHP/Laravel, Java, React, Angular, Odoo (v16, v18)

Version Control: Git, GitLab, GitHub

PROFESSIONAL EXPERIENCE

DevOps Engineer II | Innovate Nepal Group | Kathmandu, Nepal *June 2024 – Present*

- Sole DevOps engineer operating and monitoring 15+ Linux servers across DEV, INT, and PROD, sustaining 99.9% uptime, secured with UFW firewalls and Fail2Ban hardening.
- Manage 500+ containers running in production at any given time, spanning databases, application services, and internal tooling across the environment.
- Built and operated a 3-node K3s cluster on VMs (1 master: 4 vCPU/16GB, 2 workers: 8 vCPU/32GB dedicated to DEV and INT) with Longhorn for persistent storage. Created custom Helm charts with Traefik handling DNS-based domain routing.
- Run ArgoCD GitOps across 8 services (5 Django microservice stacks with Celery, Redis, RabbitMQ, and Flower; 3 Java stacks) deployed from a single monorepo via webhook-triggered pipelines.
- Implemented HashiCorp Vault (KV engine) for centralized secrets (DB credentials, API keys, admin keys) with per-developer, per-environment access control and automatic app restarts on secret changes.
- Built a full observability stack (Grafana, Prometheus, Loki, Promtail) plus an Elastic Stack (Elasticsearch & Kibana, both 8.x and 9.x) for centralized logging of the different application stack, cutting mean time to detect incidents by an estimated 40%.
- Hosted a private Harbor container registry with image scanning and vulnerability checks, integrated directly into CI/CD pipelines.
- Automated backups with 25+ optimized cron jobs across database and application servers (plus Docker pruning and Elasticsearch snapshots), syncing to cloud storage via rclone — cutting manual backup time from 2-3 days to a scheduled job.
- Wrote Bash scripts to parse Loki logs into per-service files for faster troubleshooting, plus hardening scripts to automatically back up critical production files.
- Hosted and fine-tuned Odoo ERP (v16 & v18) instances, implementing performance monitoring dashboards in Grafana.

- Discovered a critical JavaScript injection vulnerability during an infrastructure review; remediated it by deploying a WAF via Caddy and implementing rate limiting.
- Trained and mentored a junior DevOps engineer across Docker, K3s, and networking — he's now capable of independently covering full infrastructure operations when I'm on leave.

Freelance DevOps Engineer | Self-Employed | Remote (part-time) *May 2023 – Present*

- Architected and hosted a client subscription service on AWS (EC2, S3, Route 53, EBS, EFS) with NGINX Proxy Manager for reverse proxy, a fully Dockerized application, and a GitHub Actions pipeline for automated deployments — optimized to run at roughly \$30/month.
- Delivered end-to-end DevOps for multiple clients: Linux server setup, Dockerized deployments, and CI/CD via GitHub Actions.
- Managed DNS, SSL certificates, and reverse proxies using Cloudflare and NGINX Proxy Manager.
- Deployed and optimized production web applications across cPanel and self-hosted container environments.

KEY PROJECTS

Enrollment & Attendance Management System *[Java | GitLab CI | Harbor Registry | Docker Compose | K3s | Grafana]*

Migrated a 15+ microservice Java application from manual Jenkins to a custom GitLab CI pipeline, tuning it from 10-15 minutes to 3-5 minutes with optimized Docker images. Built conditional deployment logic for individual services and full-stack releases, and stood up a private Harbor registry integrated directly into the pipeline.

Multi-Tenant Django Platform *[Python/Django | Docker Compose | GitLab CI | Reverse Proxy]*

Scaled a multi-tenant tracking platform from 3 to 8 tenants; diagnosed unbounded CPU/memory growth from Django's default worker scaling and applied container resource limits, freeing roughly 12GB of system memory (10-15% of total). Fine-tuned the monorepo GitLab CI pipeline from 7-8 minutes down to 2-3 minutes.

IAM, CLMS & College Websites *[PHP/Laravel | Docker | Private Registry | GitLab CI]*

Deployed and optimized the IAM, CLMS, Islington College, and Herald College Kathmandu platforms, cutting Docker image sizes by roughly 80% and sustaining 99.07% uptime across all four. CLMS handles 300-400 concurrent users at peak, while the college sites are SEO-optimized for high-traffic public access.

DajuVai.com E-Commerce Platform *[Node.js | Docker | GitHub Actions | Caddy]*

Replaced a manual SSH + git pull deploy process (3-5 minutes per release) with a GitHub Actions pipeline that ships in 10-20 seconds. Reduced image size through multi-stage Docker builds and self-hosted the production environment with Caddy auto-SSL and a private registry.

EARLIER EXPERIENCE

Data Analyst | Cloud Factory, Kathmandu *Nov 2021 – Mar 2022*

Data Manager & Customer Service Rep. | Best Himalaya Pvt. Ltd., Kathmandu *Aug 2019 – Aug 2023*

EDUCATION

BSc (Hons) Computer Science | University of Wolverhampton (Herald College Kathmandu) *May 2021 – Feb 2024*

2× AAA Scholarship recipient for academic excellence; focus on AI, software development, and core computer science.

LANGUAGES

English • Nepali • Chinese (Mandarin) • Hindi