

Nguyen Nhat Hieu

 github.com/hieu180230  [linkedin.com/in/nnhieu](https://www.linkedin.com/in/nnhieu)  hieu180230@gmail.com

SUMMARY

Results-driven DevOps Engineer with a strong foundation in cybersecurity and DevSecOps. Skilled in designing automated CI/CD pipelines and orchestrating containerized cloud environments using Kubernetes, Docker, AWS, and Azure to ensure resilient and secure software delivery.

PROJECTS

Cloud-Native Portfolio Architecture

Reactjs/Next.js, Rust (Actix), K3s/K8s, Docker, GitHub Actions, ArgoCD, Oracle Cloud

Oct 2025 – Present

- Architected and deployed a containerized microservices application on an Oracle Cloud ARM64 Kubernetes (K3s) cluster.
- Implemented GitOps CI/CD pipelines using GitHub Actions and ArgoCD, dynamically injecting Helm values to ensure automated, synchronized deployments from the manifest repository.
- Secured internal microservice communication by implementing a Backend-For-Frontend (BFF) pattern and routing traffic via CoreDNS, completely shielding the Rust/MongoDB backend from public exposure.
- Configured Traefik Ingress and Oracle Cloud VCN Security Lists to manage external traffic exposure and internal cluster routing.

Microservices CI/CD & AKS Deployment (Spring PetClinic)

Azure, Docker, K8S, Jenkins

March 2025

- Orchestrated a complete CI/CD pipeline on Azure Kubernetes Service (AKS) for a distributed microservices architecture, including API Gateways and Discovery Servers.
- Built multi-stage Jenkins Pipelines (Pipeline-as-Code via Groovy) to automate parallel Maven builds, automated testing (JaCoCo, JUnit), and deployments.
- Optimized container management by automating Docker image versioning with Git commit IDs and establishing secure pushes to private container registries.
- Provisioned and managed AKS node pools, isolating master nodes for high availability while configuring worker nodes for scalable workload execution.

Scalable AWS Cloud-Native E-Commerce Platform

April 2025

- Migrated a monolithic platform into a distributed, highly available AWS architecture by decoupling storage to S3, databases to RDS, and utilizing serverless Lambda functions for event-driven tasks.
- Configured an Application Load Balancer (ALB) with health checks to ensure 99.9% availability and managed traffic distribution across multiple availability zones.
- Enforced a "Defense in Depth" security posture using AWS WAF to mitigate XSS and SQL injection attacks, alongside strict Security Groups for least-privilege access.
- Engineered a cloud financial monitoring suite using AWS CloudWatch and AWS Budgets, achieving 0% budget overrun by implementing automated alerts for forecasted usage spikes.
- Developed event-driven triggers using AWS Lambda to handle stateless backend processes, reducing the overhead on the primary web server.

PARTICIPATION

SAB in HCMUS | Vice President

Sept. 2024 – Sept 2025

Served as Vice President of SAB in HCMUS, contributing to the organization and execution of diverse student activities, including academic programs, arts and entertainment events, and sports competitions.

Code Mely | Collaborator - Community Team

Feb. 2024 – Feb 2025

Collaborated with the Community Team at Code Mely, contributing to the production of engaging talk shows featuring industry professionals, co-organizing events with major tech companies, and developing educational YouTube content.

EDUCATION

University of Science - Vietnam National University, Ho Chi Minh City
B.S. Cybersecurity

2022 – Present
Current GPA: 3.0/4.0

SKILLS

Programming languages: C/C++, Python, and Rust. HTML, CSS and NodeJS frameworks.

CI/CD & Automation: GitHub Actions, Jenkins, Linux (Ubuntu)

Cloud & Infrastructure: AWS, Azure, Oracle Cloud.

Containerization & Orchestration: Docker, Kubernetes (K8s/K3s), ArgoCD, Helm.

Networking & Security: CoreDNS, Traefik, AWS WAF, IAM

SOFT SKILLS

Team Collaboration & Leadership - Experienced in working in cross-functional teams and leading small project initiatives in the university.

Problem-Solving & Critical Thinking - Able to analyze complex systems and design efficient, scalable solutions.

Skilled in English Communication - 7.5 IELTS

Time Management - Balanced development, testing, and deployment phases efficiently by prioritizing critical features and automation.