

Thanh Dang Ngo

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Objectives

I'm a DevOps Engineer specializing in designing, building, and implementing infrastructure that enables comprehensive and scalable platforms. I bring a strong ability to research, work with consistency, and adapt quickly to new technologies. My open-minded approach and direct communication style allow me to collaborate effectively across teams and deliver reliable solutions in complex environments.

Experience

VSI JSC.

11/2022 - 10/2025

DevOps Engineer

DevSecOps Platform Implementation - Public Sector Client

07/2025 - 10/2025

- Installed an OpenShift cluster in a restricted environment using centralized repository management.
- Participated in the development of DevSecOps processes, documentation, and workflows.
- Performed black-box container image analysis using Docker-in-Docker (DinD).
- Implemented a Cloud-Native Application Protection Platform (CNAPP) solution (Prisma Cloud) on OpenShift to provide real-time threat detection, workload protection, and deployment governance.

Technologies: OpenShift, CNAPP, Docker in Docker

API Management Platform Deployment - Big4 State-owned Bank (Client)

03/2025 - 09/2025

- Contributed to the design and implementation of an active-warm standby architecture to improve availability.
- Deployed IBM API Connect across OpenShift (containers) and VMware (VMs) environments.
- Maintained configuration and deployment workflows using GitOps practices with ArgoCD.
- Set up centralized logging and monitoring using ELK and Grafana integrated with OpenShift Monitoring.
- Implemented API governance controls such as rate limiting, IP whitelisting, and circuit breaker policies.
- Performed backup & restore operations of API management application data using MinIO as object storage.
- Conducted performance testing with K6 to validate system throughput (2000+ TPS).
- Participated in API deployment through Jenkins pipelines.

Technologies: IBM API Connect, OpenShift, VMware, ELK, Grafana, K6

DevSecOps Platform Implementation - Big4 State-owned Bank (Client)

12/2024 - 04/2025

- Collaborated on architecture design and resource planning for a scalable DevSecOps platform.
- Assisted in setting up Kubernetes clusters using Ansible and RKE2.
- Automated tool provisioning with GitOps (ArgoCD) using Helm charts and Kubernetes manifests.
- Deployed core infrastructure components including ingress, storage, object storage, and PostgreSQL clusters.
- Implemented toolchain service covering CI/CD, secrets management, artifact repositories, and code quality scannings: Jenkins, HashiCorp Vault, Nexus Repo, SonarQube.
- Provided support on DevSecOps practices and team workflows.

Technologies: Kubernetes, Ansible, ArgoCD, Helm, MinIO, CloudNativePG, Jenkins, Vault, Nexus Repo, SonarQube

Internal Lab Infrastructure Setup (Private Lab)

04/2024 - 10/2025

- Built and maintained an internal lab for 20+ engineers for platform testing and hands-on experimentation.
- Selected and configured pfSense as the routing and firewall solution to segment and secure lab networks.
- Installed and operated a vCenter environment of 4 ESXi hosts (total: 128 CPU cores, 2 TB RAM, 26+ TB storage).
- Implemented a modern VPN solution using WireGuard containerized with Docker to provide remote access.
- Installed and managed OpenShift clusters integrated with Google OAuth2 for authentication.
- Configured vSAN (single-node) with 10 Gbps direct connectivity to compute resources.
- Gained hands-on experience with enterprise hardware (Dell, HP, ASUS, Aruba).

Technologies: pfSense, VMware ESXi, vCenter, vSAN, WireGuard, OpenShift, HAProxy, OAuth2

Cloud Engineer

GCP Landing Zone & First Application Migration – Big4 State-owned Bank (Client)

11/2023 - 04/2024

- Supported the design and implementation of a GCP landing zone aligned with cloud security and networking best practices.
- Assisted with network configuration including shared VPCs, VPN connectivity, subnets, and firewall rules.
- Contributed to the first application migration: Compute Engine VMs, containers, and image publishing.
- Helped provision and configure a private GKE Autopilot cluster and Cloud SQL for PostgreSQL.
- Worked on hardening infrastructure with Cloud Armor, Workload Vulnerability Scanning, and Artifact Analysis.

Technologies: Compute Engine, GKE Autopilot, Cloud SQL, VPC, Cloud Armor, Private Service Connect, IAM

Development Phase

11/2022 - 10/2023

- Built foundational knowledge across infrastructure and platform technologies, including TCP/IP networking, Linux, Docker, Kubernetes, virtualization, bash scripting and Windows Server.
- Practiced GCP fundamentals, covering organization setup, resource hierarchy design, IAM, networking, and compute resource provisioning.
- Participated in proof-of-concept (PoC) activities to evaluate solutions based on customer requirements.

Personal Projects

Home Lab

12/2021 - present

- Owned and operated a 27U server-rack home lab with multiple servers (including Dell PowerEdge R730xd), total: 40+ CPU cores, 300+ GB RAM, and 24+ TB storage.
- Practiced Kubernetes installation from scratch (Kubernetes the Hard Way).
- Experimented with running DeepSeek-R1 (14B) LLM locally using Ollama and OpenWebUI.
- Gained familiarity with Type-1 hypervisors such as Proxmox and VMware ESXi.
- Set up a personal DNS server (AdGuard), and deployed a Google Drive alternative using Nextcloud (LAMP stack).
- Implemented observability using Prometheus and Grafana for metrics collection and visualization.

Technologies: Proxmox, Ubuntu, VMware ESXi, vSAN, LAMP, ZFS, SAS, HPA, IPMI

Sports Live-Streaming Website

03/2023 - 12/2023

- Deployed a live streaming platform serving 350+ concurrent viewers.
- Configured pfSense as router and firewall, handling all network traffic.
- Deployed Owncast via Docker, integrated with OBS for broadcasting.
- Set up Dynamic DNS with Cloudflare to update dynamic public IP automatically.
- Implemented Caddy as reverse proxy with automated TLS (Let's Encrypt) for HTTPS.

Technologies: pfSense, Cloudflare, Caddy, Let's Encrypt, Owncast, Docker, OBS

Certificate

CKA: Certified Kubernetes Administrator

The Linux Foundation - [Certificate ID: LF-x73wkufxyk](#)

Issued **02/2026**

Expires **02/2028**

Education

NATIONAL ECONOMICS UNIVERSITY

Bachelor of Economics

Hanoi, Vietnam

09/2017 - 03/2022

Additional

GitHub: [Thanh Ngo](#)

LinkedIn: [Thanh Ngo](#)

Language Skills: English (Effective), Vietnamese (Native)

Technical Skills: Researching, Technical Documentation Writing