

Phan Hoang Nguyen

Backend Engineer

Hanoi, Vietnam | +84 86-551-0025 | nguyenph.ptit@gmail.com | [LinkedIn](https://linkedin.com/in/nguyenphan14) | [GitHub](https://github.com/phannnguyen14)

Summary

Backend Engineer with 3+ years of experience building scalable, cloud-native distributed systems. Primary expertise in Node.js, including NestJS and Fastify, with hands-on Golang experience and a strong foundation in system design, microservices, and performance optimisation.

Technical Skills

Area Skills
--- ---
Languages TypeScript, JavaScript, Go
Frameworks NestJS, Fastify, Express, Gin
Databases PostgreSQL, MySQL, MongoDB, Redis
Messaging RabbitMQ, event-driven architecture
Cloud & DevOps AWS EC2, RDS, S3, Lambda, API Gateway, Glue, Athena, Lake Formation, Docker, Kubernetes, GitLab CI/CD
Security OAuth2, Keycloak, secure API design, rate limiting
Architecture Microservices, distributed systems, RESTful APIs, cloud-native system design
Tools Nginx, Linux, Git, Postman, K6, Jest, Swagger

Professional Experience

CMC Global – Software Engineer

Feb 2024 – Present

- Maintained and extended a hybrid e-commerce platform on AWS using Node.js, Lambda, API Gateway, DynamoDB, EC2, RDS/Aurora, SQS, SNS, and EventBridge.
- Improved database query performance by 20% through DynamoDB access-pattern optimisation and RDS/Aurora query tuning.
- Reduced AWS infrastructure costs by 30% through Lambda right-sizing, DynamoDB capacity tuning, and event-flow refinement.
- Built AWS Glue and AppFlow ingestion pipelines from SAP, SharePoint, and internal applications into S3.
- Processed Bronze, Silver, and Gold data layers with AWS Glue ETL, Crawlers, Visual ETL, and Glue Catalog.
- Applied data governance and monitoring with Lake Formation, IAM, SSO, Macie, CloudWatch, and CloudTrail.

NOTA Game Studio – Software Engineer

Oct 2023 – Feb 2024

- Designed distributed backend architecture for a game publishing platform serving 200K+ monthly active users.
- Built high-performance Fastify, PostgreSQL, and Redis microservices for real-time game operations.
- Reduced infrastructure costs by 30% by migrating services to AWS Lambda, API Gateway, and S3.
- Built GitLab CI/CD pipelines for zero-downtime deployment to staging and production.
- Developed internal CMS and event management systems integrating third-party services.

Open Techiz – Backend Developer

Oct 2021 – Oct 2023

- Built RESTful APIs with NestJS and MongoDB for V Golf, a social golf-tracking platform.
- Deployed and managed services with Docker Swarm and GitLab CI/CD.
- Developed core backend services in Go with Gin for Heavy Bag Pro, a real-time boxing training application.
- Designed and optimised MySQL schema and indexing strategies for high-volume workout data.

Notable Projects

URL Shortener System – Kubernetes + Golang

- Designed and deployed a high-throughput URL shortener on Kubernetes with horizontal auto-scaling and load balancing.
- Implemented the backend in Go with Gin, Redis caching, and PostgreSQL for high-concurrency link resolution.
- Applied API rate limiting and built CI/CD pipelines for automated deployment.

Certifications

- AWS Certified Solutions Architect – Associate, May 2025 – May 2028
- TOEIC 700, Dec 2023 – Dec 2025

Education

Bachelor of Science in Software Engineering – Posts and Telecommunications Institute of Technology, Sep 2019 – Apr 2024.