

# Phuong Tan Thanh

Go Vap, Ho Chi Minh City | [phuongtanthanh99@gmail.com](mailto:phuongtanthanh99@gmail.com) | 0868 970 552  
[linkedin.com/in/thanh-phuongtan](https://www.linkedin.com/in/thanh-phuongtan) | [github.com/ptt3199](https://github.com/ptt3199) | [phuongtanthanh.vercel.app](https://phuongtanthanh.vercel.app)

## PROFESSIONAL SUMMARY

Backend Engineer with hands-on experience in Python, FastAPI, Next.js, and cloud platforms (AWS, GCP). Proven ability to design, deploy, and maintain scalable microservices, CI/CD pipelines, and secure backend systems. Quick learner, strong communicator, and passionate about delivering clean, maintainable code. Recognized for technical leadership, problem-solving, and collaboration in fast-paced environments.

## EXPERIENCE

### Backend Developer

*IPSIP*

**Mar 2025 – Present**

*Ho Chi Minh City, Vietnam*

- Develop and maintain Python-based backend microservices using FastAPI for security threat detection products
- Implement serverless backend services with AWS Chalice and DynamoDB, optimizing for scalability and performance
- Collaborate with data science teams to transform ML models into production-ready RESTful APIs and web interfaces
- Provide technical support and solutions to internal teams, translating business requirements into technical implementations
- Apply clean code principles and maintain comprehensive documentation for all backend services

### Backend Developer

*Oryza System JSC*

**Apr 2024 – Mar 2025**

*Ho Chi Minh City, Vietnam*

- Led development team building Oryza-AI platform using Python, FastAPI, and microservices architecture
- Designed and implemented RESTful and asynchronous APIs for camera management and AI integration systems
- Established CI/CD pipelines using GitLab CI and Docker containerization for streamlined deployment processes
- Architected scalable MongoDB database schemas and implemented RabbitMQ for reliable asynchronous task processing
- Enhanced system security through Keycloak integration, comprehensive API authentication, and data encryption
- Maintained Next.js frontend application, demonstrating full-stack capabilities across the technology stack
- Optimized system performance through efficient database queries, strategic caching, and code refactoring
- Collaborated with stakeholders to translate business needs into technical solutions and system updates

### Data Scientist

*AI Vision*

**Jun 2023 – Mar 2024**

*Ho Chi Minh City, Vietnam*

- Developed and deployed end-to-end AI-powered e-commerce chatbot using Langchain, OpenAI API, and RAG architecture
- Built scalable backend systems for computer vision applications using AWS cloud services (DynamoDB, Lambda, API Gateway)
- Implemented CI/CD pipelines using GitHub Actions for automated testing and deployment of web application backends
- Applied Agile/Scrum methodologies in daily development, participating in scrums and sprint retrospectives
- Collaborated with cross-functional teams to deliver high-quality solutions in fast-paced development environment
- Recognized as Employee of the Year for exceptional technical contributions and problem-solving abilities
- Maintained clean, efficient, and well-documented Python code following best practices and coding standards

## PROJECTS

### Personal Portfolio Website

*Next.js, TypeScript, Tailwind CSS, Vercel*

*2025 – Ongoing*

- Modern, responsive portfolio with markdown-based CMS, AI-powered note creation, and secure admin authentication
- Integrated Google Gemini AI, GitHub API, and Stagewise for content management and development workflow
- Deployed on Vercel with dark/light mode, dynamic project/blog management, and professional contact form
- Live:** [phuongtanthanh.vercel.app](https://phuongtanthanh.vercel.app) | **GitHub:** [github.com/ptt3199/my-website](https://github.com/ptt3199/my-website)

## Flash Card Learning App

*Next.js 15, Supabase, Clerk Auth, TypeScript*

*2025 – Ongoing*

- Intelligent flashcard app for language learning with cloud sync, AI-powered definitions, and audio support
- Dual storage (local/cloud), real-time sync, and mobile-optimized UI
- Integrated Supabase PostgreSQL, Clerk Auth, and Dictionary APIs
- **Live:** [flashcard-ptt.vercel.app](https://flashcard-ptt.vercel.app) | **GitHub:** [github.com/ptt3199/flashcard](https://github.com/ptt3199/flashcard)

## Bank QR Code Generator

*React, Go, Tailwind CSS, Vercel*

*2025*

- Fintech app generating TCCS 03:2018/NHNNVN compliant VietQR codes for all major Vietnamese banks
- Ultra-fast Go serverless backend, React frontend, and mobile-friendly design
- CRC-16 checksum validation, multi-bank support, and Vercel edge deployment
- **Live:** [bank-qrcode-generator-phi.vercel.app](https://bank-qrcode-generator-phi.vercel.app) | **GitHub:** [github.com/ptt3199/bank-qrcode-generator](https://github.com/ptt3199/bank-qrcode-generator)

## EDUCATION

### B.E. in Mechatronics

*Ho Chi Minh City University of Technology (PFIEV Program)*

**Aug 2018 – Jun 2023**

*Ho Chi Minh City, Vietnam*

- Thesis: Chinese Chess Robot (CV, ML, Python) – 99.8% accuracy in piece recognition
- Developed chess engine, mechanical/electrical analysis, and demoed full system

### Math Major

*Hung Vuong Highschool for the Gifted*

**Aug 2014 – May 2017**

*Gia Lai, Vietnam*

- Vietnam National Informatics Olympiad participant; 2nd place provincial informatics (2015, 2016)

## TECHNOLOGIES

<b>Backend</b>	Python (FastAPI, Django), Java (Spring Boot), RESTful API Design
<b>Databases</b>	PostgreSQL, MongoDB, DynamoDB, Supabase
<b>DevOps &amp; Cloud</b>	Docker, AWS (EC2, S3, Lambda, Chalice), Google Cloud Platform, CI/CD (GitHub Actions, GitLab CI), Traefik, RabbitMQ
<b>Frontend</b>	Next.js, React, TypeScript, HTML, CSS, JavaScript
<b>Tools &amp; Practices</b>	Git, Microservices, Agile/Scrum, Linux, Bash, Nginx, Unit Testing (pytest)
<b>Data Processing</b>	PowerBI

## CERTIFICATIONS & HONORS

### Top 5 Most Active Mentees

*Back Khoa Mentoring Season 6*

**2022**

*Vietnam Alumni Mentoring*

### Online Certifications

*Coursera, Datacamp, Hackerrank*

**2021 – 2023**

- Key areas: Machine Learning, Deep Learning, Cloud (GCP), SQL, Python, Java.

## VOLUNTEERING

### Team Leader

*BKFC Toi Yeu Bach Khoa - THPT Chuyen Hung Vuong Gia Lai*

**Nov 2018 – Aug 2019**

- Led a team of 20 members to organize an Admission Counseling program, attracting over 200 students.
- Managed social media and created monthly performance reports.

## LANGUAGES

<b>English</b>	Professional working proficiency
<b>French</b>	Elementary proficiency