



Phan Van Hoang Anh

Software developer

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SUMMARY

Developer with ~3 years of experience building production systems and backend architectures. Focused on designing clean, maintainable, and scalable architectures using OOP and SOLID principles. Experienced with PHP, Laravel, RESTful APIs, SQL, performance tuning and system integration. Aspiring to grow into a Tech Lead role focused on system architecture and engineering best practices

SKILLS

Backend: PHP, Laravel, MySQL, PostgreSQL, REST API, MVC **Frontend:** HTML, CSS, Bootstrap, Javascript, JQuery, SPA
DevOps: Linux (Ubuntu), Nginx, Git, CI/CD, SSL, Deployment **AI/LLM:** RAG (basic), Vector DB (basic), Ollama
Integration: Meta Conversion API, Payment Gateway APIs **Software Engineering:** OOP, SOLID, RBAC, TDD

EXPERIENCE

Hoang Khang Incotech · Project Solution Team Leader (Full-time)

Dec 2024 - Jun 2025
Ho Chi Minh City, VietNam · onsite

<https://phanvanhoanganh.com/#exp-hki-team-lead>

- Implemented strategies and action plans for project acquisition and business development.
- Evaluated project opportunities and optimized project sourcing strategies.
- Assessed project quality, software delivery standards, and team performance.

Market Analysis, Solution Design, Project Management, Team Performance

Hoang Khang Incotech · Software Developer (Full-time)

Aug 2023 - Present
Ho Chi Minh City, VietNam · onsite

<https://phanvanhoanganh.com/#exp-hki-developer>

- Developed outsourced and in-house web and mobile applications.
- Designed backend systems following OOP and SOLID principles for maintainability and scalability.
- Analyzed technical requirements and translated business needs into system design.
- Mentored and trained junior developers in software engineering practices.
- Deployed and maintained systems on production servers with CI/CD pipelines.

PHP, Laravel, MySQL, Javascript, CSS, System design, TDD, OOP & SOLID, Linux, MacOS, CI/CD, Mentoring

BAP IT JSC · Java Backend Intern (Full-time)

May 2023 - Aug 2023
Ho Chi Minh City, VietNam · onsite

<https://phanvanhoanganh.com/#exp-bap-intern>

- Assisted in developing RESTful APIs within Spring Boot microservices.
- Observed and supported the migration of monolithic components to containerized microservices.
- Worked with Docker to run and manage isolated service instances during development.
- Gained practical exposure to microservice architecture, containerization, and distributed systems.

Java, Spring Boot, PostgreSQL, Database Design, Docker, Microservices

PROJECTS

HKML — AI Document Generation System

Jan 2026 - Present

Associated with Hoang Khang Incotech

AI-powered system for generating standardized, editable document sets with high accuracy and efficiency. Built as a web application using MVC architecture.

<https://phanvanhoanganh.com/#project-hkml>

- Designed and implemented an AI-assisted document generation system to automate creation of standardized dossiers.
- Built a structured prompt and template engine to ensure output consistency and maintainable document formats.
- Integrated RAG-based knowledge retrieval using vector database (Qdrant) to improve contextual accuracy.
- Developed document export pipeline supporting editable formats (DOCX, PDF).
- Implemented output validation and post-processing to ensure document compliance and formatting integrity.

PHP 8.4, Laravel 12 (MVC), MySQL 9.2, HTML, CSS, Javascript, Linux (Ubuntu), Nginx, RAG, VectorDB, Fine Tuning.

HKI Knowledge Base — AI Knowledge System

Oct 2025 - Present

Associated with Hoang Khang Incotech

Internal knowledge base platform that enables users to query enterprise data through a chatbot interface. The system aggregates and analyzes information derived from ERP and CRM business operations. Built as a web application using MVC architecture.

<https://phanvanhoanganh.com/#project-hki-kb>

- Integrated Ollama-based local LLM runtime to serve AI inference for the RAG pipeline using self-hosted open-source models.
- Implemented RAG-based architecture combining LLM responses with vector search using Qdrant.
- Built data ingestion pipelines to transform ERP/CRM operational data into searchable knowledge embeddings.
- Designed prompt orchestration and context retrieval logic to improve response relevance and accuracy.
- Implemented chatbot interface enabling users to query internal knowledge using natural language.
- Deployed and maintained the full system stack on Linux servers including database, vector DB, and web services.

PHP 8.4, Laravel 12 (MVC), MySQL 9.2, Linux (Ubuntu), Nginx, Ollama, RAG, Fine Tuning, Vector DB (Qdrant).

HKSPACE ERP System (SaaS)

Jan 2025 - Present

Associated with Hoang Khang Incotech

ERP platform deployed as a SaaS solution for internal operations of Hoang Khang Incotech and potential enterprise clients. The system is delivered as a web application with SPA frontend and RESTful backend architecture.

<https://phanvanhoanganh.com/#project-hkspace-erp>

- Developed and maintained the entire backend API following OOP and SOLID principles using Service-Repository pattern with DTO abstraction
- Designed and implemented SaaS subscription lifecycle (signup, billing, subscriptions, seats, plans, payment, renewal, cancellation).
- Configured and deployed production environment including server, database, domain, and SSL.
- Designed and implemented a high-performance hierarchical Task Graph engine to manage deeply nested task trees with fast querying and UI rendering.
- Implemented a multi-level RBAC authorization model with three scopes: Global, Folder, and Task, enabling fine-grained permission control for system actions, folder membership, and task-level access.
- Modeled task hierarchy using the Closure Table pattern combined with a denormalized root_id cache, enabling efficient ancestor/descendant traversal while maintaining relational integrity.
- Built a pruned-tree query algorithm that reconstructs the minimal tree for UI rendering, supporting complex filters without loading entire hierarchies.
- Implemented cursor-based pagination on root trees with composite cursors to ensure deterministic ordering and scalability for large task graphs.
- Developed a DFS-based ordering algorithm that computes stable sort_order across paginated graph responses, allowing the frontend to render hierarchical structures without additional sorting logic.
- preventing N+1 queries via batched eager loading
- The graph engine supports complex filtering, permission-aware queries, and hierarchical rendering while sustaining ~250 API requests/minute in production workloads.

PHP 8.4, Laravel 12 (RESTful API), MySQL, Linux (Ubuntu), Nginx, HTML, CSS, Bootstrap, Javascript, JQuery, ViteJS, SPA.

HKSPACE Mobile App — ERP Mobile Platform

Jan 2025 - Present

Associated with Hoang Khang Incotech

Mobile application for the HKSPACE ERP SaaS platform, enabling internal operations and enterprise access through iOS and Android devices. The system communicates with a RESTful backend API and supports real-time operational workflows.

<https://phanvanhoanganh.com/#project-hkspace-mobile>

- Developed and maintained backend RESTful APIs supporting mobile application features.
- Designed and implemented real-time mobile push notification system using Expo push tokens.
- Configured and managed production infrastructure including server, database, domain, and SSL.
- Participated in technical discussions, requirement analysis, and feature planning with the product team.
- Supported deployment, release process for iOS and Android production environments and testing.

Expo, Javascript, TypeScript, CSS, PHP 8.4, Laravel 12 (RESTful API), MySQL 9.2, Linux (Ubuntu), Nginx

American Study — Education ERP/CRM Platform

Aug 2023 - Present

Associated with Hoang Khang Incotech

ERP/CRM platform supporting training management and overseas study consultancy operations for American Study Education JSC. The system manages student data, admissions workflow, marketing tracking, and operational processes

<https://phanvanhoanganh.com/#project-american-study>

- Developed core modules for marketing, sales, accounting, edu, abroad, system,.... management.
- Designed and implemented a system-wide RBAC authorization model for consistent permission management across all system resources.
- Implemented Meta marketing tracking infrastructure using Browser Pixel and Server-side Conversions API.
- Implemented idempotent event handling using event_id strategy to prevent duplicate conversion events.
- Built centralized logging and monitoring system for conversion reconciliation and debugging.
- Integrated external marketing and communication platforms (Meta, Ladipage, Subiz Chat).
- Participated in client meetings (customer, meta developers, ladipage developer,...), requirement analysis, and feature planning.
- Supported system release, on-site deployment, and client-side troubleshooting.
- Investigated production performance issues and tuned PHP-FPM process pools and Nginx worker concurrency, sustaining ~300K requests/day (~400 req/min peak during business hours) with stable uptime for over 2 years.
- Designed and operated a background processing pipeline handling 500K+ records/hour for tracking and pushing events to Meta Conversions API, using queue-based jobs, retry mechanisms, and state flags to ensure idempotency and prevent duplicate submissions.
- Implemented hourly bidirectional synchronization between the internal system and ~3 Google Sheets (~20k rows each), reconciling ~500k database records via queued jobs, controlled batching, and idempotent processing to ensure consistency and avoid API rate limits.

PHP 8.2, Laravel 10 (MVC), MySQL 8.0, HTML5, CSS3, Bootstrap 5, Javascript, JQuery, Keentthemes, Linux (Ubuntu), MacOS, Meta Browser Pixel, Meta Conversion API, Meta CAPI, Ladipage, Subiz Chat.

BAP Ecommerce — Microservices E-commerce Platform

May 2023 - Aug 2023

Associated with BAP IT JSC

E-commerce platform built using Java Spring Boot with a microservices architecture. The system supports product management, order processing, and scalable service deployment.

<https://phanvanhoanganh.com/#project-bap-ecommerce>

- Assisted in developing RESTful APIs within Spring Boot microservices.
- Observed and supported the migration of monolithic components to containerized microservices.
- Worked with Docker to run and manage isolated service instances during development.
- Gained practical exposure to microservice architecture, containerization, and distributed systems.

Java 18, Spring Boot, PostgreSQL, Docker (basic), RabbitMQ (basic), Microservices architecture (basic), RESTful API.

EDUCATION

Posts and Telecommunications Institute of Technology (PTIT - BVH)

Bachelor of Engineering (BEng) in Information Technology

Major: Software Engineering

Dec 2022 - Present (Expected Graduation: Jul 2026)

University of Transport Ho Chi Minh City (UTH)

Bachelor of Engineering (BEng) in Construction Economics

Major: Construction Economics

Oct 2018 - Dec 2022

LICENSES & CERTIFICATIONS

NVIDIA - Fundamentals of Deep Learning | Feb 2026: <https://learn.nvidia.com/certificates?id=sEDfcss6TTySFXcPJvdbfQ>

HackerRank - Node.JS | Feb 2026: <https://www.hackerrank.com/certificates/5c1237c2a40c>

HackerRank - Javascript | Issued Mar 2023: <https://www.hackerrank.com/certificates/e549fa1384ee>

HackerRank - CSS | Issued Feb 2023: <https://www.hackerrank.com/certificates/5382a28409a8>

LANGUAGES

English: Intermediate reading and listening, basic speaking

Vietnamese: Native