

Thai Hoang Nhan

FULL-STACK .NET DEVELOPER

0702 603 318 — thaihoangnhankt171qd@gmail.com — Ho Chi Minh City, Vietnam — Portfolio

Full-stack .NET Developer with experience building web applications and distributed microservices using ASP.NET Core and React. Experienced in developing scalable backend services following Clean Architecture, CQRS, and Domain-Driven Design principles. Hands-on experience with RabbitMQ, MassTransit, gRPC, Redis, SignalR, PostgreSQL, and MongoDB for building scalable and maintainable systems. Passionate about solving complex backend problems and continuously learning modern software engineering practices. Experienced in leveraging AI coding assistants to improve development productivity, debugging, and code quality.

EDUCATION

Bachelor's Degree in Computer Science (Honor Program) Jun 2022

University of Information Technology, Vietnam

EXPERIENCE

FULL-STACK DEVELOPER Ho Chi Minh City

ODH Aug 2025 – Present

- Developed and maintained backend services using ASP.NET Core and Entity Framework Core for Electronic Medical Records (EMR) systems.
- Designed and optimized SQL stored procedures to improve business workflows and application performance.
- Built and maintained WinForms desktop applications and React web applications for healthcare solutions.
- Implemented event-driven communication using RabbitMQ and MassTransit, and synchronous service-to-service communication using gRPC across distributed services.

SAP ABAP CONSULTANT Ho Chi Minh City

BOSCH Dec 2021 – Jun 2023

- Worked closely with business users, including Bosch accounting teams, to support SAP ERP business processes.
- Investigated and analyzed reported issues through debugging and functional testing to identify root causes.
- Collaborated with SAP ABAP developers by proposing solutions, validating implemented fixes, and supporting production deployment.
- Coordinated with cross-functional teams to ensure stable ERP operations and timely issue resolution.

PROJECTS

TechStore — Full-Stack E-Commerce Microservices Platform Portfolio — Backend — Frontend

ASP.NET Core 9 · React 19 · TypeScript · PostgreSQL · MongoDB · Redis · RabbitMQ · gRPC · Docker · Railway

- Architected **13 independent microservices** (Identity, Product, Order, Payment, Cart, Search, Notification, Comment, Review, Recommendation, Email, Photo, Gateway) with shared BuildingBlocks implementing base repository, unit of work, and **CQRS** result types, following **Clean Architecture** and **Domain-Driven Design**.
- Implemented **Saga Orchestration** using MassTransit state machine to coordinate distributed order workflows: stock reservation → payment creation → Stripe webhook → order confirmation → stock commit, with automatic rollback and separate COD/online payment flows.
- Built a **multi-gateway payment system** (Stripe, Momo, VNPay, COD, Bank Transfer) using the **Strategy + Factory pattern**, with **SignalR** real-time push of payment intent to the client and a reconciliation job for edge-case recovery.
- Developed an **AI-powered recommendation engine** using product vector embeddings (**pgvector**), computing a weighted average interest vector from user behavior (view ×1, add-to-cart ×1.5, purchase ×2) and returning top-N products via cosine similarity search.

- Applied **Redis caching** to MongoDB search queries with automatic cache invalidation via MassTransit consumers on product create/update events, reducing repeated database load.

SKILLS

Programming Languages

- C#, TypeScript
- SQL, Python

Frontend

- ReactJS
- Redux Toolkit / RTK Query
- Vite
- Material UI, Ant Design

AI-Assisted Development

- GitHub Copilot
- Claude / ChatGPT
- AI-assisted architecture design & code review

Backend

- ASP.NET Core
- Entity Framework Core
- REST APIs, gRPC
- SignalR
- RabbitMQ, MassTransit
- JWT Authentication

Architecture & Infrastructure

- Clean Architecture
- CQRS
- Domain-Driven Design (DDD)
- PostgreSQL
- MongoDB
- Redis
- Docker
- Git, Railway

LANGUAGES

- English – Intermediate (Technical Communication)