TRẦN LÊ QUỐC BÌNH

SOFTWARE ENGINEER

Mobile: +84 394 109 818
Gmail: tranlequocbinh2003@gmail.com
Github: github.com/QuocBinh042
LinkedIn: linkedin.com/in/quocbinh

SUMMARY

Final-year Software Engineering student at Industrial University of Ho Chi Minh City (IUH) with strong academic background and a passion for building scalable, efficient software systems. Awarded multiple scholarships for academic excellence and national-level recognition in informatics and innovation competitions. Eager to contribute to impactful engineering teams, with a strong foundation in programming, algorithms, and software design.

EDUCATION

Industrial University of Ho Chi Minh City (IUH) Sep 2021 - Present

Bachelor of Engineering in Software Engineering

- ***GPA:*** 3.31 / 4.00
- ***Relevant Courses:*** Data Structures, Object-Oriented Programming, Software Architecture, Web Development, Database Systems.
- Awarded 3 scholarships for academic excellence: 2 full (100%) and 1 half (50%)

TECHNICAL SKILLS

- ***Languages:*** Java, JavaScript, TypeScript, SQL, C/C++
- ***Libraries & Frameworks:*** ReactJS, Next.js, Spring Boot
- ***Databases:*** MongoDB (NoSQL), MySQL/MSSQL
- ***Cloud Platforms:*** AWS (basic knowledge)
- ***Tools & Technologies:*** Git, GitHub, Postman, VS Code, IntelliJ IDEA, Docker

AWARDS & ACHIEVEMENTS

- **Second Prize (National) & First Prize (Provincial) –** Youth and Children's Creativity Contest (2019–2020)
- **Second Prize (Provincial) -** High School Informatics Contest (2019)
- **Second Prize (Provincial) -** Vietnam Science and Engineering Fair (2019–2020)
- **Consolation Prize (Provincial) -** Youth Informatics Contest (2019)
- **Top 7** - Non-Major Informatics Olympiad, IUH (2022)

PERSONAL PROJECTS

Shoe Store – Full-Stack E-commerce Web App Dec 2024 – May 2025

Link github:

- **Backend:** github.com/QuocBinh042/shoe-store-backend
- **Frontend:** github.com/QuocBinh042/shoe-store-frontend

A fully functional online footwear retail system supporting product browsing, cart management, secure ordering, and admin operations. Built to simulate a real-world deployment-ready web platform.

- **Frontend:** Developed with **ReactJS,** using **Ant Design** for responsive UI components and Redux Toolkit for state management (authentication, cart, checkout). Implemented role-based routing with React Router DOM and connected to backend APIs using Axios with global error/loading states.
- **Backend:** Built with **Spring Boot**, secured by **JWT** authentication and **Spring Security** for user/admin separation. Used Spring Data JPA with **MySQL** for managing product, user, and order data. Integrated VnPay SDK for payment gateway and Cloudinary for product image storage and delivery.
- **Infrastructure:** Applied **Redis** for caching and session storage to optimize performance. All APIs documented with **Swagger**. Containerized the system using **Docker Compose** for consistent deployment across environments.

Graduate Thesis Management System for Master's and Doctoral Programs – IUH May 2025 - Present

A centralized management system designed to fully digitalize the end-to-end process of handling graduate theses and dissertations for Master's and PhD students at Ho Chi Minh City University of Industry (IUH). The system replaces manual operations with a unified electronic platform that complies with academic regulations, improves operational efficiency, ensures transparency, and enhances administrative supervision.

- **Frontend:** Developed with **Next.js + TypeScript**, utilizing **Ant Design** to deliver a modern, fully responsive UI across devices. Implemented role-based routing using Next Router to serve multiple user roles (student, supervisor, academic officer, and department head). All academic forms are validated according to institutional regulations. Integrated with backend services via Axios (REST) and gRPC, with global error and loading state management.
- **Backend:** Built with **Spring Boot 3**, following a microservices architecture combined with Domain-Driven Design (DDD). Each service handles a distinct domain (e.g., thesis, identity, file, notification). Authentication is managed with **JWT** and **Spring Security**, enabling fine-grained role-based access control. Thesis data is stored in **MongoDB**. Inter-service communication is handled via gRPC, with asynchronous workflows (notifications, progress tracking) implemented using RabbitMQ.
- **Infrastructure & Deployment:** The system is fully containerized using **Docker**, with flexible deployment via Docker Compose (development) and Kubernetes (staging/production) using Helm charts. Redis is applied for caching and session storage optimization. The entire build–test–deploy pipeline is automated through GitLab CI/CD, supporting environment-specific configurations for multi-stage deployments.