Trần Hữu Tài

Software Engineer

+84 376 100 548 ► huutt201@gmail.com https://github.com/Null120423 • 60 Đ Làng Tăng Phú, Tăng Nhơn Phú A, Thủ Đức, Hồ Chí Minh, Việt Nam

CAREER OBECJTIVE

I want to become a software engineer who can develop and architect systems capable of supporting millions of concurrent users in the future. I am learning how to design smooth, scalable, and reliable systems. My long-term goal is to continue expanding my knowledge and experience to build innovative solutions that make a meaningful impact.

EDUCATION

Tôn Đức Thắng University 2021 - 2025

Computer Network and Data Communication GPA: 8.2 / 10

Completed core and advanced courses in programming, algorithms, OOP, and data structures, with additional knowledge in information systems, system design, and UML modeling. During university, I joined research projects under the guidance of lecturers and skilled peers, which enhanced both technical and collaborative abilities. I also self-studied modern technologies such as React Native and applied them to build academic and personal projects, including Android apps (e-learning, video sharing, real-time music player) and structured APIs, while practicing core algorithms like balanced trees, binary trees, and encryption.

EXPERIENCE

APETECHS JOINT STOCK COMPANY

3/2024 - 10/2025

FullStack Developer

1.5 years of experience specializing in scalable web and mobile applications. Strong expertise in system architecture, backend APIs, and intuitive user-facing solutions that enhance performance and user satisfaction. Applied technology to real-world business workflows including procurement, inventory management.

Skills

- System architecture & scalable solution design
- Web & mobile application development
- REST API design & database management
- Integration with third-party systems (Payment, Payoo, GPS/Location Services, Durp)
- UI/UX optimization and navigation flow design

Tech Stack

- Frontend: ReactJS, React Native
- Backend: NestJS, REST APIs, Microservices.
- Database: PostgreSQL, Firebase, My Sql
- Integration: Payment Gateways, GPS/Location Services, Payroll, Sepay, Misa
- Tools: Git, Docker, Agile/Scrum, Jira, ApeBot(Self Company tools)

Responsibilities

- Designed and implemented mobile applications for warehouse management and procurement systems in F&B chains.
- Developed web-based booking systems (e.g., pickleball courts) ensuring smooth UI/UX and optimized navigation.
- Built and maintained scalable backend services with NestJS, including database modeling, REST API development, and third-party integrations.
- Actively contributed to system architecture design, including initializing and building core source code for a Manufacturing Execution System (MES).
- Ensured maintainability, performance optimization, and adherence to best practices in software engineering.

Key Projects & Features

 Mobile Development (React Native): Procurement & warehouse systems with integrated Payment gateways, GPS, and location-based features.

- Web Development (ReactJS): User-facing booking system delivering high responsiveness and engagement.
- Backend (NestJS): Scalable APIs and server-side solutions supporting thousands of concurrent users and transactions.
- System Architecture: MES platform core source code setup and design review under team lead supervision.

PROJECTS

AI-powered Travel Assistant for Foreign Tourists in Ho Chi Minh City (Hodos) - University Project

8/2024 - 10/2025

Role: Full-stack contributor (Mobile & Backend Development), Data Collector, Researcher - Team size: 2

A smart travel assistant app helping international tourists overcome language barriers, navigation issues, and trip planning challenges while exploring Ho Chi Minh City.

Responsibilities & Contributions

- Backend (NestJS): Designed and developed RESTful APIs, integrated third-party systems, and managed PostgreSQL database.
- Frontend (Android Jetpack Compose): Built and optimized mobile UI/UX, connected to backend services, and improved usability.
- Data Collection: Collected and prepared image datasets (landmarks, food) for AI training and evaluation.
- AI Development:Integrated a pre-trained Computer Vision model (YOLO) for local landmark and food recognition.
- Implemented RAG-based prompting with external LLMs to deliver context-aware travel recommendations while reducing hallucinations.

Key Features

- Food and location classification in Ho Chi Minh City.
- Trip planning for travelers.
- AI-powered chatbot support for travelers.
- RAG to reduce token usage and search location data (using vector search in PostgreSQL with the vetor extension).
- JWT, secret keys, and device ID for authentication.
- Push notifications (via FCM tokens).
- OTA updates for the app (CodePush).
- Trip visualization on maps (using Google Maps and processed location data).
- Scheduling feature (single-service scheduling).
- Deployment with Kubernetes for the main system server.
- Schedule API deployed with Nginx on Ubuntu 22.04.
- CI/CD with GitHub Actions pipeline.
- Integrated offline AI models into the Android app.
- Integrated SePay for payment module.

Technologies

NestJS, React.js, Jetpack Compose, PostgreSQL, Cloudflare R2, YOLO (Computer Vision), LLM, RAG, Ubuntu, GitHub Actions, TensorFlow, Kaggle, SePay, Sh Script.

Impact

Delivered a personalized, reliable, and interactive travel assistant that enhances the experience of foreign tourists and promotes Ho Chi Minh City's culture through technology.

More:

https://hodos-admin.gitlabserver.id.vn/landing

FNB Management System – Procurement Management System for Americano Chain (Company Project) 3/2024 - 8/2025

Role: Mobile App Deveoper , Backend Developer - Teamsize : 12

A system designed to manage and optimize the purchasing operations of the Americano store chain, focusing on inventory control, supplier coordination, and cost efficiency.

Responsibilities & Contributions

- Backend (NestJS): Designed and developed RESTful APIs, integrated third-party systems (Ipos, HRM), and managed PostgreSQL database
- Frontend (Mobile App React Native): Built and optimized mobile UI/UX, connected to backend services, and improved usability.

Key Features

- Manager Master data. Product (Items Such as intergratint in products like Bánh mì, Cà phê, Properties, Equipments, Materials), Recipe...
- Distribute data product to all branch operations.
- Intergrate DB from HRM system, collect data branch, employee, BOD, role, department, ...
- Price warning when re calculator in the end of the month.
- Control quantity when employee order product.
- Control starndard number of properties, equipments each branch.

- Control boudary order for material in brand. (Brand is has a lot of branch)
- Export report for price, sell of month ipos in end of the month.
- Control price of recipe, warning when increase or decrease.
- Otimize module recevied product from suppliers.
- Intergrate QR for product apply when check inventory, Recevied product.
- Handle discrepancies at the end of each month
- HRM authentication, Aplly role Base Access.
- OTA update (Expo)
- Push notification (FCM token)

Technologies

NestJS, React.js, React Native, My SQL, AWS S3, Expo.

Pickleball Management System - Court Booking, Tournament, and Academy Platform (Company Project) 6/2025 - 10/2025

Role: Mobile Developer, Backend Develop - Teamsize: 12

A comprehensive system designed for the Pickleball community, covering court reservations, tournament organization, academy training, and mobile user engagement.

Responsibilities & Contributions

- Backend (NestJS): Designed and developed RESTful APIs, integrated third-party systems (Payoo, Durp, SSO google), and managed PostgreSQL database.
- Frontend (Mobile App Flutter): Initially developed by a third-party vendor and later handed over for further operation and maintenance.

Key Features

- Implement module booking court.
- Intergrate payment from payoo
- Develop feature and modify mobile connect to new Restful API.
- Develop user experience from booking module (Mobile App).
- Integrate SSO (Google platform)

Impact

- Improved efficiency for clubs and academies in managing operations.
- Enhanced user experience for players through a unified mobile platform.
- Promoted growth of the Pickleball community with digital tools.

Technologies

NestJS, React.js, Flutter, My SQL, AWS S3, Payoo.

Manufacturing Execution System - Masan Group (Company project - Phasre 1)

05/2025 - 08/2025

Role: Full Stack Developer (React Js, Nest Js)

Developed and integrated a Manufacturing Execution System to monitor and control production lines in real time. Core features included production scheduling, material tracking, quality management, and equipment efficiency reporting, with seamless ERP integration for end-to-end manufacturing visibility.

Responsibilities & Contributions

- Backend: Built RESTful APIs for line process modules, received recipe data for execution, and managed master data.
- Frontend: Developed an admin dashboard to manage production configurations and monitor line status.

Key Features

- Implemented set point configuration by product and process, enabling flexible setup of production parameters.
- Supported real-time adjustment of workflows and process steps tailored to each product type.
- Enhanced visibility of production progress and process control, improving manufacturing efficiency and traceability.

Technologies

• NestJS, PostgreSQL, React.js, AWS Lambda Functions.

ACTIVITIES

Scientific Research - AI-powered Travel Application

1/2024 - 3/2025

Participated in a scientific research project to develop a mobile application for international tourists, integrating AI for location and food recognition in Ho Chi Minh City.

- Collected and prepared datasets (landmarks, local foods) for model training and evaluation.
- Integrated a computer vision model (YOLO) into the mobile app for real-time recognition.
- Researched and applied RAG techniques with LLMs to provide context-aware travel recommendations.
- Enhanced tourist experience by overcoming language barriers and navigation difficulties.

Top 1 – Startup Competition, Faculty of Information Technology 2025 with the project HODOS (an intelligent travel assistant application for international tourists in Ho Chi Minh City).

Top 5 – University-wide Startup Competition 2025, project HODOS, among [50] competing teams.

ENGLISH CERTIFICATION

Obtained B1 English Certificate.

Currently preparing for a higher-level English proficiency test.

SKILLS

Hard Skills

• Backend Development:

NestJS, Java (Spring Boot), RESTful APIs

• Frontend Development:

React.js, AngularJS

 Mobile Development: React Native, Android Studio, Jetpack Compose

• **DevOps & Cloud:** Docker, Git, GitHub, Ubuntu, Linux Server Management

• Other: CI/CD pipelines, system deployment, server monitoring

Soft Skills

- Self-learning & Adaptability
- Problem-solving
- Teamwork & Collaboration
- Communication
- Time Management

INTERESTS

Technology & Coding: Developed modular, maintainable code and implemented organized project structures to enhance scalability and clarity. Actively researched and integrated emerging app development technologies to stay at the forefront of industry trends. Optimized high-load systems to achieve measurable performance improvements.

Travel & Exploration: Utilized motorbike road trips and exploration to develop effective stress management techniques and apply creative problem-solving strategies to overcome challenges in both professional and personal contexts.