TRAN NGOC HUNG

Backend Developer | Web & Application Security Specialist

👤 Profile

I am a passionate software developer actively pursuing a career in the FinTech industry, with 4 years of experience in trading platform, government solution development and 2 years in banking web/app security, mostly focused on FinTech projects. My expertise includes building cryptocurrency trading platforms, automated trading bots, smart contracts and digital solutions for government, along with conducting security audits and penetration testing for banking web and app services. I am committed to delivering secure, high-performance FinTech solutions.

💼 Employment History

Backend Developer at Vietnam Silicon, Ho Chi Minh

Mar 2025 — Present

AgriTech Digital Transformation Platform

Passionate backend developer contributing to the digital transformation of the agricultural sector through a large-scale traceability and management system for agricultural products—from cultivation and processing to export and consumer access.

Key Contributions:

- Designed and developed backend services and APIs enabling full supply chain traceability (farmer - processor - distributor - consumer).
- Built core microservices for product registration, cultivation tracking, QR-based traceability, and inspection workflows.
- Architected a distributed system using Go, Python, Node.js, NATS, Redis, and Airflow with microservices on AWS.
- Implemented data models and analytics backends using MongoDB and PostgreSQL for visualization dashboards and monitoring tools.
- Applied CI/CD, Docker, and Kubernetes to ensure scalable, automated deployment and reliable system operations.
- Collaborated on system security audits and data protection compliance.

Focus: Secure, scalable, data-driven backend solutions that enhance transparency, efficiency, and traceability in complex supply chain systems.

Developer at Freelancer

Jun 2025 — Present

Freelancer working on projects spanning **financial automation and AI chatbots**, building practical solutions for real-world problems.

Key Projects:

Details

Ho Chi Minh, 700000
Vietnam
0789978995
trhung26620@gmail.com

Date of birth

25-05-2000

Nationality

Vietnam

Links

Linkedin
Github
Personal website

Skills

Research

Go, NodeJS, Python

Microservice, Distributing system

Web/App Security

Trading platform, fintech business

Group working, English

Languages

Vietnamese

English

Hobbies

Technology, finance and business research, games, art, swimming

- **Telegram Investment Bot:** Developed a bot to **sync user data from Binance**, manage **investment portfolios, order statistics, and profits**, and enable **report export**. Implemented backend services, data processing, and exchange API integration for automated tracking and portfolio management.
- **AI Q&A Chatbot (In Development):** Designing a **smart AI assistant** leveraging **internal data processing, vector databases, and LangChain** to provide contextual Q&A capabilities. Focused on **knowledge retrieval, NLP pipeline, and system integration** (project ongoing).

Tech Stack: Python, Telegram Bot API, API integration, LangChain, Vector DB

Fullstack Developer at Nami Exchange, Ho Chi Minh
Mar 2022 — Mar 2025

Cryptocurrency Trading Platform & Blockchain Solutions

Passionate full-stack developer driving innovation in digital finance through high-performance cryptocurrency exchange systems, automated trading solutions, and blockchain technology applications—from core trading infrastructure to user-facing platforms and Web3 integrations.

Key Contributions:

- Designed and developed complete **CEX platform** with **spot/swap/futures** trading services supporting market, limit, stop, and OCO order types, including **real-time data feeds** (market watch, depth book, TradingView integration).
- Built high-performance **matching engine** in Golang achieving **111,698 TPS** benchmark on shared 4-core VPS, ensuring rapid order execution and market stability.
- Architected order routing service for automated liquidity integration with external exchanges, enhancing trading depth and execution quality.
- Implemented multi-chain Web3 solutions across **Ethereum, BSC, and Solana** for on-chain **transaction scanning, deposits, and withdrawals**.
- Created comprehensive frontend experiences using NextJS/ReactJS with trading fee management, marketing events, and responsive design.
- Integrated AppsFlyer SDK for user acquisition tracking and automated revenue analytics, enhancing operational insights.
- Developed **Automated Market Maker** (AMM) tool in Golang to automate the placement and matching of cryptocurrency orders, designed to control and stabilize market prices in alignment with external market trends.
- Built **Trading Algorithm Backtesting** platform in Python to evaluate trading strategies in simulated market conditions using historical data, focusing on identifying profitable patterns and minimizing risk.
- Created **Tap to Earn Game – Telegram MiniApp** with

NestJS backend to support real-time gameplay, secure user authentication, and dynamic game logic for handling tap events, scores, and rewards.
- Conducted security audits on smart contracts, penetration testing per **OWASP** standards, and led workshops on DeFi vulnerability analysis.
- Deployed microservices architecture using MongoDB, MySQL, Kafka, Redis, NATS, and Docker for scalable distributed systems.

Focus: High-performance, secure, and scalable trading infrastructure that enables seamless cryptocurrency trading, automated market operations, and blockchain interoperability in complex financial ecosystems.

Web/App Security Pentester at Techlab Corporation, Ho Chi Minh
Feb 2020 — Feb 2022

Security specialist with 2 years of experience in web/mobile app security, focusing on the financial sector.

- **Banking Security**: Testing more 10 web/app banking projects, identifying and mitigating vulnerabilities following **OWASP standards**.
- Experienced in blackbox testing, code auditing, cryptography (AES/RSA).
- Proficient in various security tools: Burp Suite, Acunetix, Frida, Jadx, APKTool, Android Debug Bridge (ADB),...

Developer at Personal projects, Ho Chi Minh
Sep 2022 — Mar 2023

Web3 Development & Blockchain:

- **Booking Care Dapp:** Create a decentralized application for booking healthcare services, leveraging blockchain technology to pay for services.
- **Charity DAO App:** Designed a decentralized autonomous organization application to streamline charitable donations and governance through smart contracts.
- **NFT Marketplace:** Developed a platform for minting, buying, and selling non-fungible tokens.

Security Project:

- **Web Vulnerability Scanner:** Engineered a tool to identify and assess security vulnerabilities in web applications, enhancing overall security posture.

🎓 Education

Bachelor of Information Security, FPT University, Ho Chi Minh
Sep 2018 — Sep 2022

High-achievement subjects: Programming C, Java, Java OOP, Desktop Java Application, JS/HTML/CSS, Python, Database Systems, Data Structures and Algorithms, Networking, Web Security, Database Security

❖ Courses

Burp Suite Certified Practitioner, PortSwigger
Jan 2023 — Jan 2028

Certified Ethical Hacker (CEH), SaigonCTT
Jan 2021

Data Communications and Network Services, Cisco
Jan 2020

Web Design for Everybody: Basics of Web Development & Coding, Coursera
Oct 2020

Python for Everybody, Coursera
Feb 2021

Startup Entrepreneurship, Coursera
Dec 2020

◀ References

Than Cong Dinh (Senior Developer) from Nami Foundation
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