

VO DUY TAN

AI Software Engineer

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 Ho Chi Minh City, Vietnam

SUMMARY

Software Engineer with 4+ years of experience building scalable full-stack systems and data-intensive platforms. Specializing in real-time analytics, search optimization, and applying machine learning to production environments. Currently pursuing advanced research in Deep Learning and Generative AI while maintaining expertise in modern web technologies and distributed systems.

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, TypeScript, SQL

AI/ML Stack: PyTorch, TensorFlow, LangChain, Hugging Face Transformers, scikit-learn, RAG Systems

Backend Technologies: Node.js, NestJS, Express.js, FeathersJS, RESTful APIs, GraphQL

Frontend Technologies: React.js, Next.js, Redux, TailwindCSS, Material-UI

Databases & Search: MySQL, MongoDB, PostgreSQL, Apache Solr, Elasticsearch, Redis

Infrastructure & DevOps: Docker, Git, RabbitMQ, Socket.IO

Cloud & Tools: AWS, Google Cloud Platform, Postman, Jira, Confluence

PROFESSIONAL EXPERIENCE

YouNet Media

Ho Chi Minh City, Vietnam

Full Stack Developer

Aug 2021 – Present

Tech Stack: Node.js, NestJS, React.js, Next.js, Apache Solr, MongoDB, MySQL, Redis, RabbitMQ

- Developed and optimized Social Analytics Platforms (SocialHeat & Ecomheat), providing real-time market insights from millions of social media discussions.
- Engineered a high-availability Crisis Alert system using **SocketIO**, **Redis**, and **RabbitMQ** for instantaneous multi-channel notifications.
- Designed and maintained scalable database architectures with **MySQL** and **MongoDB** to handle high-volume data ingestion.
- Implemented **Apache Solr** with customized Vietnamese tokenizers, significantly improving search precision and system throughput.

Edgeworks Software LTD

Ho Chi Minh City, Vietnam

Frontend Developer Intern

Mar 2021 – Jul 2021

Tech Stack: Next.js, React.js, Redux, REST APIs

- Developed responsive user interfaces for the Malis3 resource management system using **NextJS** and **ReactJS**.
- Collaborated with the engineering team to optimize front-end performance and ensure seamless API integrations.

EDUCATION

University of Information Technology (VNU-HCM)

Ho Chi Minh City, Vietnam

Master of Science in Computer Science

Sep 2025 – Present

- Research Focus:** Deep Learning, Machine Learning Theory, Generative AI, Explainable AI (XAI)
- Relevant Coursework:** Advanced Machine Learning, Neural Networks & Deep Learning, Natural Language Processing, Computer Vision

- **GPA:** 8.02/10
- **Relevant Coursework:** Data Structures & Algorithms, Database Systems, Software Engineering, Distributed Systems

SELECTED PROJECTS

Corrective RAG System for LLM Hallucination Mitigation

2025

Technologies: Python, LangChain, FAISS, Transformers, FastAPI

- Developing an advanced Retrieval-Augmented Generation pipeline with self-correction mechanisms to reduce LLM hallucinations by automatically validating generated responses against retrieved documents
- Implemented custom evaluation framework measuring relevance, faithfulness, and answer correctness, achieving improvement in factual accuracy over baseline RAG systems
- Integrated multiple retrieval strategies with intelligent routing based on query complexity and domain requirements

App Fund - Collaborative Fund Management Platform

2026

Technologies: Node.js, Express, MongoDB, PayOS API, React.js

- Built a comprehensive group fund management application supporting real-time transaction tracking, automated reconciliation, and multi-user budget planning for active users
- Integrated PayOS payment gateway with webhook-based automation, reducing manual payment verification time