

HA THU TRAN

Backend Engineer @ TikTok | Finance & Software Engineering Enthusiast

www.tranhathu.com • tranhathuwork@gmail.com • linkedin.com/in/tran-ha-thu

EXPERIENCE

- TikTok · Backend Engineer

Jul 2026 – Present

 - Developed internal products with TypeScript and Go to improve reliability and observability of internal services.
- TikTok · Software Engineering Intern

Jan 2026 – Mar 2026

 - Developed internal products with TypeScript and Go to improve reliability and observability of internal services.
- National University of Singapore · Teaching Assistant

Aug 2023 – Dec 2025

 - Taught programming concepts to 1,000+ students in JavaScript, Java and Python through self-prepared tutorials.
 - Course ratings: 4.8/5 for CS1101S and 4.7/5 for CS2103T, against a department average of 4.3.
- GIC · Software Engineering Intern

Jun 2025 – Sep 2025

 - Engineered products for public market investments and optimized workflows for 300+ staff using TypeScript, C#, Python and SQL.
- Uptale · Software Engineering & AI Intern

Jan 2025 – Jun 2025

 - Implemented a full RAG pipeline in TypeScript and C# for gamified educational experiences used by 100+ customers.
- Housing Development Board · Data Science Intern

May 2024 – Aug 2024

 - Built commercial rent prediction models with 88% average accuracy using Python, Random Forest, XGBoost and K-Nearest Neighbors.
 - Automated financial reports with Excel and VBA, improving reporting efficiency by 80%.
- Eastspring Investments · Data Engineering Intern

May 2023 – Aug 2023

 - Maintained 100+ production and raw database tables using Python and SQL.
 - Optimized an AI chatbot using the ChatGPT API.
- A*STAR Research · Artificial Intelligence Intern

Dec 2019 – Jan 2020

 - Trained a robot arm from scratch to clear 10 types of trash using Python and OpenCV.

EDUCATION

- National University of Singapore · Bachelor of Computing, Computer Science

Aug 2022 – May 2026

First Class Honours · GPA 4.6/5.0 · Distinction in Software Engineering

 - Invited to CVWO; teaching assistant for five programming modules.
 - Planned 20+ university events as a residential assistant and CCA committee leader.

SKILLS

Programming: Python, C#, C++, TypeScript, Java, Go, JavaScript

Frontend: HTML, CSS, React, Tailwind CSS, Cypress

Backend: Express.js, REST APIs, PostgreSQL, MySQL, Microsoft SQL Server, Cosmos DB

Other: CI/CD, Azure, Kubernetes, Docker, Jira, Git, Temporal, software engineering, machine learning, deployment

ACHIEVEMENTS

- SoC Student Award (Bronze) and Tembusu College Best Project Winner, 2025.
- 1st Runner-up, SMU Hack for Cities (Quantum Computing) Hackathon, 2023.
- Dean's List and Academic Excellence Award, 2022.

PROJECTS

Trader's Edge · Final Year Project

- Gamified investment training with human and AI robo-traders.

Personal Website · tranhathu.com

- Built with React, HTML, CSS and JavaScript.

Stock Tracking Graph · github.com/oeggy03/stock-graph-jpmc

- React, TypeScript, JPMorgan Perspective and Python with Yahoo Finance data.

Task Chatbot · oeggy03.github.io/ip

- Java, JavaFX, object-oriented programming and Git.

TeleAI · oeggy03.github.io/TeleAI

- Python, TensorFlow and OpenCV for CIFAR-10 image classification via Telegram API.

FoROOM Forum · devpost.com/software/foroom

- React, Go, REST APIs, MySQL, JWT and bcrypt.