Thai Nguyen Gia Bao

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I am a passionate software developer specializing in backend development, system architecture, and performance optimization, with a goal of advancing as a professional Software Engineer.

Education

Ho Chi Minh University of Technology - VNU

Computer Science, Honors program. GPA 3.8/4, 8.88/10

District 10, Ho Chi Minh City Ungraduated

Project

TickPortal

Sep 2024 - Nov 2024

- Developed a Discord bot that centralized notifications from Gmail, Facebook to Ticklab's Discord, automated workflows for email forwarding, CV management, and candidate scheduling, streamlining HR processes.
- Solo project, achieved a 50% time reduction in HR workload
- Techs: ExpressJs, Google API (Gmail, Drive), Facebook API, Discord API, Notion API

Smart Student Printing Service

Aug 2024 - Dec 2024

- Developed a web platform that enables students to locate available printers, manage print jobs, and track usage efficiently; provides administrators with robust tools to monitor printing activities, oversee payment processing, and manage resources effectively.
- Team leader, backend developer in a 6-member team
- Techs: ExpressJs, OpenAPI, ReactJS, Typescript, Bootstrap, PostgreSQL

IQThaiSon

Feb 2025 - Present

- Developing an English-learning platform for real users, equipped with advanced features including preventing unauthorized sharing, secure video streaming to prevent unauthorized downloads, payment management, and course administration.
- Full-stack developer, Figma designer in a 2-member team
- Techs: NextJs, ExpressJs, TypeScript, SocketIO, PostgreSQL, AWS S3

Ticklab Website

Mar 2025 - Present

- Building an organizational website to showcase the activities and achievements of the Ticklab organization, including posts, projects, events, roadmaps, and the portfolio of each member
- Full-stack developer in a 3-member team
- Techs: NextJs, PavloadCMS, MiniIO, PostgreSQL

Activities

Research about Decentralized Federated Learning

 $\operatorname{Jun}\ 2025$ - Present

- Advisors: Nhan Trong Phan, Ph.D
- Research on privacy-preservation techniques and the integration of blockchain technology within Decentralized Federated Learning.

Manage virtual machine for TickLab

Dec 2024 - Present

- Operating System: Proxmox VE
- Research Team: deployed three virtual machines two designated for primary operations and another as a backup solution, and implemented PCIe passthrough to enable GPU acceleration (RTX 4060Ti and RTX 3060) to train machine learning models
- Engineering team: established dedicated virtual machines for individual team members, ensuring isolated and secure deployment environments; provided comprehensive support for virtual machines creation, SSH tunnel configuration, and project deployment, including integration with the Ticklab domain.

Skills & Interests

Programming Languages: JavaScript/TypeScript, C/C++, Python, SQ

Frameworks/Library: ReactJs, NextJs, TailwindCSS, Bootstrap, ExpressJs, NextJs, ReactNative

Tools: Docker, CI/CD, Nginx, GitHub

OS: Ubuntu, Proxmox VE

Language: English, Vietnamese (native) Interests: Math (calculus), table tennis