



Bùi Hoàng Thái

MIDDLE SOFTWARE ENGINEER

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"Be the change that you want to see in the world."

About Me

Middle Software Engineer with over 3 years of experience building scalable, data-intensive systems. I hold a degree in **Foreign Economics** from **Foreign Trade University**, providing me with a strong foundation in business logic that complements my technical expertise. Since the start of my professional journey, I have been a dedicated member of **Amcolab Co., Ltd**, specializing in **Ruby on Rails**, **React.js**, and **AI-assisted backend services**. I am passionate about designing RAG workflows and optimizing system performance for production-ready environments.

Education

Foreign Trade University (FTU)

Hanoi, Vietnam

Bachelor of Foreign Economics

Experience

Amcolab Co., Ltd

Hanoi, Vietnam

Software Engineer

Jun 2022 – Present

- Engineered scalable backend components and high-volume data pipelines using Ruby on Rails.
- Optimized system performance and resolved critical production bugs to ensure high uptime and stability.

Key Projects at Amcolab

Aiorder | Smart Restaurant Management System

Jun 2025 – Dec 2025

- Developed an **O2O ERP solution** managing reservations, orders, staff shifts, and inventory.
- Integrated **Dify AI** to build a personalized ordering assistant based on user history and real-time data.
- Implemented **WebSockets** for real-time order synchronization across departments.
- Tech Stack:** Ruby on Rails, ReactJS, Dify AI, PostgreSQL, Redis, WebSockets.

Aituber | AI Virtual Idol Interaction Platform

Jun 2023 – Feb 2025

- Engineered a real-time interaction platform featuring chat, karaoke, and YouTube live streaming.
- Built a high-concurrency messaging engine using **ActionCable** and **Redis** for low-latency communication.
- Integrated **FFmpeg** with Node.js to process and synchronize audio/video streams for YouTube Live.
- Optimized background jobs and system architecture to ensure stable streaming performance under high traffic.
- Tech Stack:** Ruby on Rails, Node.js, Redis, Sidekiq, WebSockets, PostgreSQL, FFmpeg.

AINORY | Social Taxi Carpool Matching Platform

Dec 2022 – Jun 2023

- Architected core backend infrastructure using **Ruby on Rails**, focusing on high-availability and transactional integrity.
- Developed a matching engine logic for trip offers and join requests, optimizing urban mobility coordination.
- Implemented real-time event handling using **ActionCable** for instant trip status updates and match confirmations.
- Optimized spatial data handling and trip-matching performance to ensure low-latency responses during peak hours.
- Tech Stack:** Ruby on Rails, PostgreSQL, Redis, ActionCable, Sidekiq, RESTful API.

Listtool | Automated Lead Generation & Form Submission

Jun 2022 – Dec 2022

- Built a robust **MVC-based architecture** to manage complex data relationships between leads and dynamic templates.
- Developed a web scraping and parsing engine to extract contact information across diverse third-party websites.
- Engineered an automated form filler that intelligently maps templates to varying fields using pattern recognition.
- Optimized email delivery workflows and data validation layers to ensure high success rates for outreach campaigns.
- **Tech Stack:** Ruby on Rails (MVC), PostgreSQL, Selenium, Sidekiq, TailwindCSS.

Programming Skills

Languages: Ruby, JavaScript (ES6+), TypeScript, SQL, HTML/CSS

Frameworks & Libraries: Ruby on Rails, React.js, Node.js, Next.js, Turbo and Hotwire, TailwindCss, ActionCable

Tools & Infrastructure: PostgreSQL, Redis, Sidekiq, Docker, Swagger, Rspec, Firebase, Git, FFmpeg, WebSockets