

Minh Vu

vtaminh02@gmail.com | (413) 275-6387 | [linkedin.com/in/tminhvu](https://www.linkedin.com/in/tminhvu) | github.com/Tristesse02 | tminhvu.xyz

Education

University of Massachusetts Amherst

May 2025 – May 2026

M.S. Computer Science and Mathematic

Amherst, MA

- Courses: Programming Methodology, Machine Learning, Algorithm Design, Search Engine, Computer Systems, Operating System

Work Experience

Jack Applies

Jul 2025 – Aug 2025

Fullstack Engineer Intern

Miami, FL

- Developed **Azure & OpenAI-powered resume generation system** that produces ATS optimized PDFs, increasing user satisfaction from 75% to 90% for **25,000+ users**
- Eliminated race conditions in job application processing by architecting **dual-queue system** using **RabbitMQ** and **AWS Lambda**, ensuring **100% data consistency** for **200+ concurrent applications**
- Built **CI/CD pipeline** with **GitHub Actions** and **bash scripts**, managing infrastructure deployment to **AWS EC2** via **Terraform**
- Built multi-platform job crawler using **PuppeteerJS & Fire Crawler**, achieving 99% data extraction accuracy and reducing manual collection from days to under 10 minutes per job board

FPT Software

Jun 2023 – Aug 2023

Frontend Engineer Intern

Hanoi, Vietnam

- Modernized prescription management system for **700+ pharmacies** by migrating legacy VB6 application to **Angular + TypeScript** platform, reducing processing time by 40% and improving invoicing accuracy
- Built real-time drug inventory tracking system using **NgRx and RxJS**, eliminating 20 hrs/week of manual auditing work
- Maintained drug inventory data consistency for **20,000+ records** between **frontend and backend systems** by implementing custom **Pub/Sub architecture** and reusable **JavaScript SDK**
- Improved sprint delivery consistency by following **Agile-Scrum methodologies** with Japanese development team, using **Jira workflows** to maintain clear communication and prevent task conflicts

Viettel AI

Jun 2024 – Aug 2024

Machine Learning Engineer Intern

Hanoi, Vietnam

- Boosted enterprise document search relevance by 20% by implementing full-text + semantic retrieval system using **Apache Solr and FAISS**, delivered through scalable **gRPC microservices**
- Enhanced targeted search capabilities by building knowledge graph from internal worker data using **Microsoft GraphRAG**, demonstrating improved query precision for enterprise documents

Advance Learning Technologies Lab

Sep 2022 – May 2023

Undergraduate Research Assistance

Amherst, MA

- Reduced game-design review time by 90% by developing an automated analysis pipeline for **JSON-formatted designs** and presented findings at the 2023 ERSP National Conference
- Automated logic pattern extraction from 54 student game designs by implementing **BERT** and graph modeling techniques, eliminating manual review bottlenecks and achieving 0.67 model accuracy

Project

XploreIt | Meta Quest, Vapi, Gemini, Claude, WebRTC, OpenCV

- Won **2nd Place at HackUMass** for developing a **VR assistant** that guided older adults (75+) through daily activities (digital tasks, household chores), increasing task completion success by 70% in pilot tests
- Improved elderly user accessibility by designing **WebRTC voice system** with simplified language prompting, sequential step guidance, and confirmation loops, reducing tech anxiety for seniors with limited experience

Beatcode | FastAPI, RestfulAPI, Svelte, Docker, WebSocket, gRPC, Protobuf APIs, SQLAlchemy, PassLib

- Attracted **1,000+ unique users** by building **scalable multi-client** coding platform with **FastAPI + PostgreSQL**, enabling competitive programming battles
- Enabled scalable **real-time gameplay** for **300+ concurrent game rooms** by integrating **WebSocket** with **gRPC + Protobuf APIs** for low-latency client-server communication, backed by Dockerized code-judging environments
- Secured user authentication and data by implementing **OAuth 2.0** social login (Google/GitHub), Passlib session management, and CORS policies, protecting 1,000+ user accounts

Technical Skill

- Languages: Python, JavaScript, Typescript, Java, HTML, CSS, C/C++, C#, Go, Rust, Swift, Kotlin
- Cloud & Infrastructure: AWS, Azure, Docker, Kubernetes, Terraform, Bazel, Jenkins, GitHub Actions
- Databases & Storage: PostgreSQL, SQL, MongoDB, S3, Redis, Cassandra, Kafka, RabbitMQ
- Networking & APIs: gRPC, Protocol Buffers, REST/HTTP+JSON, GraphQL, OAuth 2.0
- Web/Frameworks: ReactJS, NodeJS, Angular, ExpressJS, Spring Boot, Django, FastAPI, Flask, Tailwind, Figma, Webflow
- AI/ML: TensorFlow, PyTorch, Sklearn, JAX