

Hung Truong

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EDUCATION

University of South Florida

Bachelor of Science in Computer Science - Dean's List

Expected graduation: May 2027

Tampa, FL

- **Coursework:** Data Structure and Algorithms, System Design, Object Oriented Programming, Database Design, Web Development, Cloud Computing, Distributed Systems, Operating Systems, Secure Coding, High Performance Computing, Software Testing
- **Certificates:** CS50's Introduction to Cybersecurity (Harvard University), Machine Learning with Python (MIT)
- **Honors/Awards:** MoMo Techday Hackathon 2024 - 3rd Place, USF Green & Gold Directors Scholarships, Dean's List

EXPERIENCE

Microsoft

May 2025 - Aug 2025

Atlanta, GA

Software Engineer Intern

- Designed and implemented a scalable data pipeline using **C#** with **message queue** architecture to automate processing Azure Virtual Machines downtime records, raising availability to **99.99%** for millions of users.
- Resolved **15% of outdated data cases** by collaborating with cross-functional teams to define data validation logic using **KQL** queries on **Azure Data Explorer**, ensuring consistent alignment between downtime records and root cause classification.
- Authored **design documentation** for data pipeline architecture, establishing standards for system scalability and maintenance.
- Implemented a **decision tree-based** labeling system to trace and analyze VM downtime across phases (Detection, Diagnostics, and Mitigation), resulting in a **10% reduction in recovery time**.
- Built **PowerBI** dashboards to visualize downtime patterns enabling proactive system performance monitoring.
- Engineered a load testing tool in **Go** to simulate VM failure scenarios and validate pipeline performance under stress, **improving test execution speed by 3x** and ensuring system reliability at scale.

MoMo (M Service)

May 2024 - Aug 2024

Ho Chi Minh City, Vietnam

Software Engineer Intern

- Developed a high-performance internal dashboard using **JavaScript** and **Thymeleaf** for Vietnam's largest digital wallet platform to monitor data of multiple database tables and reload Redis configurations, reducing external tool costs by **\$1.5 million annually**.
- Devised a unified data access interface integrating **Oracle**, **Cassandra**, and **MySQL** databases using **Java**, **Vert.x**, **Kafka**, and **RabbitMQ**, reducing data processing time by **30%** and optimizing system performance.
- Engineered a microservices architecture using **Java** and **Vert.x** with custom logging and exception handling systems, reducing the average time to identify and fix bugs by **35%**.
- Designed and executed comprehensive unit tests using **JUnit** across all critical services, achieving **90%** code coverage.

Flow

Aug 2023 - Dec 2023

Austin, TX

Software Engineer Intern

- Developed **RESTful APIs** using **Django** with optimized database queries through indexing and denormalization, storing data in **AWS RDS** with **Redis** caching, reducing average response time **from 200ms to 150ms**.
- Engineered **React.js** frontend with **Material UI** using code splitting and lazy loading, resulting in **50%** faster load times.
- Automated **CI/CD** pipelines with **Bash** scripts, accelerating deployment workflows and reducing setup time by **80%**.
- Led a team of 5 interns to implement full-stack features using Agile methodology, designing workflows and organizing daily stand-ups, sprint planning, and retrospectives, improving team communication.

University of South Florida - Computer Science Department

Jan 2023 - May 2023

Tampa, FL

Research Assistant

- Applied a Smith-Waterman algorithm utilizing **CUDA** for parallel genomic sequence alignment across multiple GPUs, reducing processing time by **250%** compared to conventional CPU implementations.
- Architected a complementary task scheduler in **C++** that dynamically distributed genome fragments across the GPU cluster, balancing workloads based on sequence complexity and reducing idle GPU time by **40%**.

PROJECTS

qAnts Trader | Python, FastAPI, Google Cloud Platform, Multithreading, Caching, Rate Limiting, Docker, Airflow, Real-time Processing

- Architected trading system in **Python** with centralized Data Manager implementing **rate limiting** and **multi-level caching**, **reducing external API calls by 60%** while handling concurrent data requests from multiple financial data providers.
- Developed automated trading strategy framework with **multithreaded scanner and alert systems**, enabling real-time trade execution through parallel technical analysis algorithms.

Tinder Food - Gen AI Hacking Week | Java, Vert.x, React Native, OpenAI API, OracleDB

- Engineered a full-stack food recommendation app using **Vert.x**, **Java** and **React Native**, integrating **OpenAI API** to deliver personalized meal suggestions based on user preferences, needs, and nutritional goals.
- Implemented a swipe interface for food selection, designed 10+ **RESTful APIs**, and managed **50,000+ data** and **10,000 restaurants** in **Oracle**, boosting user engagement by 40%.

TECHNICAL SKILLS

Languages: Java, C++, Go, Python, C, C#, SQL, KQL, JavaScript, TypeScript, HTML, CSS, Bash

Frameworks/Libraries: Spring Boot, Vert.x, Django, Fast API, React, Angular, .NET, Next.js, Node.js, Express.js, Bootstrap, JUnit

Databases/Messaging: MySQL, PostgreSQL, MongoDB, Oracle, Cassandra, Supabase, Redis, Kafka, RabbitMQ, GraphQL

DevOps/Cloud: Docker, Kubernetes, AWS (EC2, S3, RDS, CLI), Google Cloud, Firebase, CI/CD, Linux, Git, Github, Postman, CUDA