

Minh (Tommy) Nguyen

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Experienced in AI/ML research, software development, and building full-stack applications. Seeking a full-time Software Engineering internship for Summer 2025 with a focus on the following area(s): Backend Development, Full-stack Development, Data Engineering, AI/ML.

EDUCATION

Villanova University

Expected May 2026

GPA: 3.96/4.00

Bachelor of Science in Computer Science, Business minor, Honors Degree

- **Awards:** Tapia 2024 Conference VU Scholar, Veritas Scholar (\$64,000), Connelly-Delouvrier Scholarship (\$30,000), AI-JAM US Silicon Valley (Gold medal), Presidential Scholar Alternate (top 2 CS student)
- **Coursework (*current):** *Large Language Model, *Computer Vision, *Database Systems, Operating Systems, Software Engineering, Computer Structure, Data Science, Programming Languages, Analysis of Algorithms, Linear Algebra, Discrete Structures, Data Structures and Algorithms
- **Involvement** (Villanova University): Badminton Club President, Vietnamese Student Association Vice President, Special Olympics Committee Member , Competitive Programming Team, Honors Student Advisory Board

EXPERIENCE

Software Engineer Intern (Full-time)

May 2024 – Aug 2024

HCM City, Vietnam

Olli Technology

- Co-developed the AI voicebot backend with 2 developers using **LangGraph** and **GPT API**; developed its prototype using **Flask**, **React**, and **gRPC** and helped secure a partnership with Malaysia's Minister of Education
- Developed an AI-powered image suggestion feature for a marketing assistant app, leveraging **Unsplash API** (free image library), **DALL-E API**, **GPT API**, and **gRPC**, resulting in a 25% increase in user engagement.

AI Research Assistant (Part-time)

May 2023 – Present

Villanova, PA

Villanova University

- Fine-tuned Large Language Models (ByT5, NLLB, DeltaLM) for translation tasks using benchmark datasets of 700,000 sentences and leveraging **Transformers**, **Tensorflow**, and **nltk** libraries, improving BLEU-score by 43%.
- Set to publish datasets of 100,000 aligned sentences in two underrepresented Nigerian languages at ICWSM 2025 and COLING 2025 conference, created through web scraping, data preprocessing, and native speaker annotations.

Undergraduate Data Research Assistant (Part-time)

Jan 2023 – April 2023

Villanova, PA

Villanova University

- Refined the text-generation of the AMR system, a Natural Language Processing tool, to sound more human-like using **Numpy**, **nltk**, and **regular expression**.
- Automated testing over large datasets and analyzed 80,000 sentences using Python, proposed mathematical expression learning to improve the system.

PROJECTS

RAG Chatbot | Python, LangChain, ChromaDB, Flask, React, Docker, AWS | [link](#)

May 2024 – Present

- Developed a chatbot utilizing **ChromaDB** to store PDF files as **vector embeddings**, leveraged **k-similarity** search to find relevant data, incorporated **GPT API** to answer user questions.
- Designed multi-chat sessions simulating ChatGPT using **React.js**, providing a responsive user experience.

VU Stock Exchange Platform | Python, Flask, React, MySQL | [link](#)

Jan 2024 – May 2024

- Integrated real-time stock data retrieval and processing using **REST APIs**; developed interactive stock price graphs using **Highcharts** and **JavaScript**, and an admin interface for portfolio management and stock creation.
- Co-designed a multi-table **MySQL** architecture database to support user info, stock prices, and credit/debit card transactions; implemented **SHA-256** for enhanced security, and optimized for handling concurrent user access.

TECHNICAL SKILLS

Languages: (Proficient) Python; (Intermediate) JavaScript, TypeScript, MySQL, R, HTML/CSS; (Beginner) Java, C++

Frameworks: React.js, Vue.js, Flask, gRPC, REST API

Developer Tools: Git, Github, Docker, AWS, VS Code, Google Colab, RStudio, Jupyter Notebook, Eclipse

Libraries: Tensorflow, Scikit-learn, LangGraph, LangChain, Pandas, Numpy, BeautifulSoup, Transformer, Concurrent