Minh (Tommy) Nguyen

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EDUCATION

Villanova University
Expected May 2026

Bachelor of Science in Computer Science, Business Minor, Honors Degree   ***GPA**: 3.96/4.00*

- **Awards**: Tapia 2024 Conference VU Scholar, Veritas Scholar ($64,000), Connelly-Delouvrier Scholarship ($30,000), AI-JAM US Silicon Valley (Gold medal), Dean's List
- **Coursework** (*current): *Database Systems, *Machine Learning, *Large Language Model, Operating Systems, Software Engineering, Data Science, Analysis of Algorithms, Linear Algebra, Discrete Mathematics, 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

Data Scientist Intern (Part-time)
Sep 2024 – Present

Product Manager Accelerator - Remote   *Boston, MA*

- Extracted and processed data from 100+ business profiles using **Google Places API** and **Pandas**, creating a vectorized database with key metrics (e.g., ratings, location, community data) for efficient analysis
- Utilized **k-similarity algorithms** and **Llama 2** to develop a recommendation system, boosting the online visibility of BIPOC-owned small businesses by providing tailored insights

Software Engineer Intern (Full-time)
May 2024 – Aug 2024

Olli Technology   *HCM City, Vietnam*

- Co-developed the AI voicebot backend with 2 developers using **LangGraph** and **GPT API**; built 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**, achieving in a 25% increase in user engagement

AI Research Assistant (Part-time)
May 2023 – Present

Villanova University   *Villanova, PA*

- 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, created through web scraping, data preprocessing, and native speaker annotations, at ICWSM 2025 and COLING 2025 conference

PROJECTS

Campus Hero App | *Python, Flask, ReactJS, Docker, AWS* | *link*   May 2024 – Present

- Developed and deployed a real-time incident alert system backend and a mental health RAG chatbot using **Python/Flask**, **Claude 3 Haiku**, and **AWS**
- Built a Public Safety Dashboard using **ReactJS**, allowing real-time monitoring of student safety on campus

RAG Chatbot | *LangChain, ChromaDB, Docker, AWS, Python, Flask, ReactJS* | *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 3.5 Turbo** to answer user questions
- Designed multi-chat sessions simulating ChatGPT using **ReactJS**, providing a responsive user experience

VU Stock Exchange Platform | *Python, Flask, React, JavaScript, 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 an admin interface for portfolio management and stock creation
- Collaborated to design a multi-table **MySQL** 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: Python, R, SQL, JavaScript, TypeScript, Java, C/C++, HTML/CSS
Frameworks: ReactJS, Vue.js, Flask, Firebase, REST API, gRPC
Developer Tools: Docker, AWS, Git, GitHub, MySQL, SQL Developer, Agile, Jira, VS Code, Google Colab, RStudio
Libraries: Pandas, Numpy, BeautifulSoup, TensorFlow, Transformer, Scikit-learn, LangGraph, LangChain, OpenCV