

Minh (Tommy) Nguyen

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Experienced in web-app development, full-stack development, backend engineering, and recommendation systems

EDUCATION

Villanova University

Expected Dec 2025

Bachelor of Science in Computer Science - Honors Degree, Business Minor

GPA: 3.97/4.00

- **Awards:** Honors Program, Dean's List, Tapia 2024 Conference VU Scholar, Veritas Scholar (\$64,000), Connelly-Delouvrier Scholarship (\$30,000), AI-JAM US Silicon Valley (Gold medal)
- **Coursework:** Operating Systems, Software Engineering, Data Structures and Algorithms, Analysis of Algorithms, Database Systems, Linear Algebra, Discrete Mathematics, Statistical Methods, Data Science, Machine Learning, Large Language Models
- **Involvement** (Villanova University): Competitive Programming Team, Honors Student Advisory Board, Special Olympics Committee Member, Vietnamese Student Association Vice President, Badminton Club President

EXPERIENCE

Software Engineer Intern (Full-time)

May 2024 – Aug 2024

Olli Technology

HCM City, Vietnam

- Co-developed the personalized voicebot with 2 developers using multi-agent workflows from **LangGraph**; built its prototype using **Flask**, **React**, and **gRPC**; 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 a 25% increase in user engagement

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 (such as ratings, location, community data) for efficient analysis
- Utilized **vector similarity**, **one-hot encoding**, ranking systems, and **Llama 2** to develop a recommendation system, boosting the online visibility of BIPOC-owned small businesses by 30% by providing tailored insights

NLP Research Assistant (Part-time)

May 2023 – Present

Villanova Center for Research and Fellowships

Villanova, PA

- Identified objectives and gathered linguistic data requirements to fine-tune large language models for translation tasks, leveraging benchmark datasets of 700,000 sentences and improving BLEU scores by 43%
- Designed a proof of concept using web scraping, preprocessing pipelines, and native speaker annotations to create 100,000 parallel sentences in underrepresented Nigerian languages, set to be published at ICWSM 2025

PROJECTS

Campus Hero App | *Python, Flask, ReactJS, Docker, AWS* | [link](#)

Aug 2024 – Sep 2024

- Created and deployed a real-time incident alert system backend and a mental health chatbot backend on AWS
- Built a Public Safety Dashboard using **ReactJS**, allowing real-time monitoring of student safety on campus

VU Stock Exchange Platform | *Python, Flask, React, JavaScript, SQL* | [link](#)

Jan 2024 – May 2024

- Developed real-time stock data retrieval with **REST APIs**, interactive price visualizations using **Highcharts**, and an admin interface for portfolio management
- Designed **MySQL** database for user profiles, stock prices, and transactions; optimized for concurrent user access

DocScribe AI | *OpenCV, EasyOCR, LangChain, Python, Flask, Docker, AWS* | [link](#)

May 2024 – Present

- Built a chatbot integrating **ChromaDB** for **vectorized** file storage and **similarity-based** data retrieval, enabling multi-session interactions in **ReactJS** that simulate ChatGPT
- Enabled text extraction from images using Contour Detection, Warped Transformation, and the **EasyOCR** model

TECHNICAL SKILLS

Languages: Python, JavaScript, TypeScript, Java, C/C++, HTML/CSS, SQL, R

Frameworks: ReactJS, Vue.js, Flask, REST API, gRPC, Firebase

Developer Tools: Docker, AWS, Git, GitHub, Agile, Jira, MySQL, SQL Developer, VS Code, Google Colab, RStudio

Libraries: Pandas, NumPy, BeautifulSoup, TensorFlow, Transformers, Scikit-learn, LangGraph, LangChain, OpenCV