Vũ Nguyễn Lan Vi

AI Engineer · Fresher

Ho Chi Minh City

0374182116 | vi.vuvivu2203@hcmut.edu.vn | March 22nd, 2003 | vnlvi2k3

Personal Profile

I'm a computer programmer with a solid background in software engineering and a deep understanding of machine learning and deep learning principles. Over the past year, I've successfully tackled real-world AI challenges, including restructuring 3D model architectures in computer vision, developing anomalous behavior detection models using graph neural networks, and addressing multimodal problems in Generative AI. Additionally, I have a strong programming foundation, having built applications and deployed systems for both healthcare and AI applications. With my leadership and communication skills, honed through scientific research participation, I am dedicated to contributing as an intern in AI Engineering or AI Research roles.

Education

Ho Chi Minh City University of Technology *HCMC, Vietnam*

Bachelor of Engineer in Computer Engineering *Sept 2021 - May 2025 (expected)*

- College Student: Junior (3rd Year)
- **GPA:** 9.3/10.0 (3.9/4.0) (Academic transcript.)
- **Courses:** Machine Learning, Principles of Programming Language, Mathematical Modeling, Data Structures and Algorithms, Probability and Statistics, Database System, Computer Network, Software Engineering, Operating Systems, Programming Fundamentals, Computer Architecture, Professional Skills for Engineers

Scientific Research

Efficient Geometric Sub-Graph Isomorphism with Graph Multi-hop Attention Networks *HCMUT, Vietnam*

AI Research Assistant *Jul 2023 - Oct 2023*

- Utilizing Kabsch algorithm and Graph Multi-hop Attention Networks to address geometric labeled subgraph isomorphism problem.
- Trained and tested on an RTX NVIDIA 1080Ti GPU.
- Achieved precision and recall rates exceeding 84% for Geometric Shapes dataset. For the Human Protein Structure dataset, with larger graph sizes and lower variance in source size, all evaluation metrics approached 99%.
- **Source code:** `https://github.com/vnlvi2k3/SubgraphMatching`
- **Proceedings track:** Link to Proceedings Track

University Projects

Semantically Consistent Few-shot View Synthesis (Few-shot NERF) *HCMUT, Vietnam*

AI Engineer *Dec 2023 - Jan 2024*

- Implemented Neural Radiance Fields with ray entropy minimization and frequency regularization to address the few-shot high-quality 3D reconstruction problem, evaluated on LEGO dataset, got 10.0/10.0 for the ML Assignment.
- **Technical Skills:** Pytorch Framework
- **Source code:** `https://github.com/vnlvi2k3/ML_ASM`

Graph Anomaly Detection *HCMUT, Vietnam*

AI Research Assistant *Oct 2023 - Current*

- Implemented Competitive Graph Neural Networks for anomaly detection on the Hive blockchain network.
- Crawled and preprocessed data from Sochain Database.
- **Technical Skills:** Pytorch Framework, Hive Blockchain APIs, SochainDB
- **Source code:** `https://github.com/vnlvi2k3/GA_Detection`

An Artificial Intelligence-Powered Software for Detecting Advertising Violations in Healthcare *HCMUT, Vietnam*

Full-stack Developer *Jan 2024 - Current*

- Served as Scrum Master, BA, Developer, and QC member in each sprint within an Agile framework.
- Implemented MVC model for Legal Document and Healthcare Unit Management modules.
- Built a usable web app with a easy-to-use interface using angular framework, performed unit testing for all modules.
- **Technical Skills:** .NET Framework, HTML/CSS, JavaScript, C#, Figma
- **Source code:** `https://github.com/vnlvi2k3/Healthcare-Violation-Detection`

Skills

Programming	Python, React, Java, Javascript, SQL, C++, HTML/CSS, .NET
Deep Learning Frameworks	TensorFlow, PyTorch, Keras
AI Techniques and Tools	NLTK, Transformers, RAG, OpenCV, CNNs, Vision Transformer, Diffusers
Miscellaneous	Git&Github, DevOps, Agile, CI/CD, Linux, Shell (Bash), Latex, Microsoft Office

Work Experience

Department of Computer Science, HCMUT *HCMC, Vietnam*

AI Research Assistant *Mar 2023 - Jan 2024*

- Participated in a VNU-HCM research project on ”3D-shape reconstruction from 2D images based on Deep Learning.”
- Collaborated with and received guidance from a Ph.D. supervisor during the research project.
- Wrote scientific reports.

Honors and Awards

2024	**Top 1**, Overall GPA of the 21st cohort in Department of Computer Science and Engineering, achieving the title of Outstanding All-around Student	*HCMC*
2023	**Top 3**, Overall GPA in University (9.4/10.0), achieving Outstanding Academic Performance (Cert.)	*HCMC*
2021	**1st Prize**, in Ho Chi Minh City Excellent Physics student (Cert.)	*HCMC*

Certificates

2024	**Data Science: Transformers for Natural Language Processing (Cert.)**	*Udemy*
2024	**Generative AI - Natural Language Processing Bootcamp 2024 (Cert.)**	*Udemy*
2024	**Natural Language Processing (NLP) in Python with 8 Projects (Cert.)**	*Udemy*

Work Experience

2023	Participated in The 2nd International Conference on Intelligence of Things (ICIT2023) & The 3rd Symposium on Computer Science & Engineering (SCSE2023).
2022	Volunteer support Admissions Counseling Day.
2022	Volunteer support the NICS Conference, an annual conference on Information Science and Computer Science.

Languages

English IELTS 6.5 (Cert.)