Hien Xuan Vu

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Education

University of Birmingham – *MSc in Artificial Intelligence (AI) and Machine Learning* 2024 – 2025

VNU-HCM - International University – *Bachelor of Science in Biomedical Engineering* 2018 – 2022

Brain Health Lab – Research Assistant

- Researched Alzheimer's disease detection using feature extraction from brain MRI scans combined with machine learning algorithms with accuracy result to
- Developed a deep learning system for detecting Alzheimer's disease from 3D brain MRI scans

Work Experience

Machine Learning Engineer, Data Nest - Data analytics for financial services in Viet Nam April 2024 – Sep 2024

- Developed and deployed the first version of an income score model, achieving a **78% AUC**, to help financial institutions verify the accuracy of customer income declarations.
- Extracted insights from raw telco data using data analysis and data mining techniques to build precise features for the income score model on the Vietnam population.
- Deployed and monitored multiple credit score models for clients in production environments
- Managed a 1PB HDFS cluster to support analytics and machine learning tasks
- Designed and built data pipelines processing **10+ billion** data points daily from telco data

AI Engineer, FPT Software Sep 2022 – April 2024

- Developed a GAN-based transfer model to generate Japanese handwriting from printed text images, increasing Japanese OCR accuracy to **93%** by applying advanced image processing techniques
- Proposed and implemented a video understanding system for human tracking and action recognition, achieving **96%** accuracy on customer test sets using pre-trained language-image models, pose estimation, and LSTM.
- Implemented LangChain, RAG, and custom OCR models for a chatbot, enabling internal document search, summarization, and information retrieval from unstructured Japanese data using vector databases
- Created a personalized learning path recommendation system for Japanese secondary students using deep learning and hybrid collaborative filtering based on Knowledge Tracing models

Algorithm Development – Internship, Fossil Vietnam May 2022 – Aug 2022

- Applied signal processing and machine learning techniques to analyze human-level performance in blood pressure and body composition measurement
- Proposed and implemented algorithms to calculate human body composition using smartwatch data
- Contributed to developing novel algorithms for smartwatches, enhancing product differentiation and competitive advantage

Skill

Machine learning: Scikit-learn, Tensorflow, Keras, Pytorch, Transformers, HuggingFace
Big Data Technologies: Hadoop, Spark, Kafka, Airflow
Other: Linux, Git, Docker, Flask, AWS, MLflow, HTML, CSS, DVC, SQL, Data Mining, Feature Engineering, LLM

Certificate

AWS Certified Solutions Architect – Associate (2024)
Machine Learning DevOps Engineer – Udacity