

Luong Hien Nga

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EDUCATION

Nanyang Technological University

BSc in Data Science and AI - CGPA: 4.86/5

Awarded ASEAN scholarship for 4 academic years

Singapore

Expected Graduation: May 2024

EXPERIENCE

S-Lab For Advanced Intelligence

Computer Vision Intern

Singapore

Jan 2023 - Present

- Explore Denoising Diffusion Probabilistic Models (DDPM) in remote sensing image change detection
- Annotate 10 remote sensing areas with 7 classes for semantic segmentation using QGIS

Asurion

Data Science Intern

Singapore

Jan 2022 - Apr 2022

- Designed functions for a web app that allow online phone insurance purchase given business requirements
- Built and deployed computer vision classification models (YOLO, MobileNetv2, Resnet50) on AWS using tools such as SageMaker, S3, and Lambda with 95% accuracy
- Tested models on AWS environment

HADTech

Backend Engineer Intern

Vietnam

Summer 2021

- Designed and developed microservices system for an educational web application using NestJs framework
- Implemented Learning Management System and Auth Gateway APIs with MongoDB integration
- Deployed and tested APIs using Docker technology

ACADEMIC PROJECTS

Tumor cells phenotyping with Machine Learning

Aug 2021 - Present

- Utilized QuPath for cell segmentation, classification and tissue segmentation
- Integrated 10x Genomics Visium data for statistical analysis using Python and R, results verified by pathologists
- Implemented autoencoder and ensemble clustering for tumor cell morphological feature clustering

Hotel Reviews Sentimental Analysis

Sep 2022 – Nov 2022

- Crawled hotel reviews from TripAdvisor using Python Selenium package
- Implemented and compared among different classification models including traditional machine learning models (RandomForest, Logistic Regression...) and SOTA neural networks (LSTM, BERT...)
- Produced a comprehensive EDA and NLP report with 91% accuracy attained in classification task

Database Construction for Online Shopping Website

Feb 2022 – May 2022

- Designed ER diagram and generated normalised database schema for an online shopping website
- Implemented database schema using My SQL

StudyBuddy App

Feb 2022 – May 2022

- Utilized Android Studio, Firebase (including Firebase Authentication and Firebase Firestore), and Google Map API to develop a comprehensive Android application with 13 functions to enhance students' study experience.
- Designed and implemented functionalities that enable students to easily connect with study partners, discover study locations, rate and review locations, and save their favorite locations.

ADDITIONAL

- Relevant coursework: Data Structures and Algorithms, Object Oriented Design and Programming, Calculus (I-III), Linear Algebra, Discrete Math, Probability and Statistics, Software Engineering, Database, Artificial Intelligence, Natural Language Processing, Data Analytics and Mining, Neural network and Deep learning
- Virtual training and development: Machine Learning (Stanford University), Python 3 Programming Specialization (University of Michigan), Microsoft PowerBI Introduction (Udemy)
- Programming Languages: Python, C, C++, Java, Javascript, Typescript