# LONG NHAT

#### Education

2020 - 2025 **Electronics and Telecommunications Engineer**, *Faculty of Electronics and Telecommunication*, University of Danang - University of Science and Technology, Danang.

- Major: Artificial intelligence engineer
- GPA: 3.6

# Work Experience

August 2024 - Computer Engineer, University of Danang - University of Science and Technology, Now Danang.

Subjects: Machine Learning, Deep Learning, Artifical Intelligence, Data Structures and Algorithms, Advanced Computer Architecture, Cognitive Systems.

#### Al Student Responsibilities and Daily Activities::

- Develop and improve object detection models
- Work on data classification and clustering projects
- Apply Machine Learning, Deep Learning algorithms for various tasks
- Process and analyze large datasets for model training and evaluation
- There are 2 years of experience in the field of AI
- 8 months of experience in Computer Vision

## My Projects

## **URL** My Github's Source Repositories

### August 2024 Object Detection and Recognition System Development using Faster R-CNN.

- Built Faster R-CNN model with MobileNetV3 backbone for object detection on Pascal VOC dataset
- Processed input images (reading, resizing, and normalizing) to ensure compatibility with the model, converting them into the appropriate tensor format
- Used a pre-trained model with default COCO weights and fine-tuned it on custom data to improve detection accuracy on the target task

#### June 2024 Football Player Detection using YOLOv5.

- Collect sports video data and annotation files. Process video data from folders containing sports videos and annotation files in JSON format
- Create and manage input data folders for training and testing YOLO models
- Convert bounding box coordinates from pixel format to normalized scale for YOLO
- Train and test for object recognition model, improve efficiency and accuracy

#### September Brain Tumor Segmentation using DeepLabPlus, U-Net.

- $2023\,$  Collect data images and annotations file. Visualization data and data processing
  - Developed U-Net and DeepLabV3+ models for brain tumor segmentation with custom architecture
  - $\ensuremath{\mathsf{Pre-processed}}$  and augmented image data to enhance model performance
  - Implemented dropout and batch normalization to optimize the model and prevent overfitting
  - Enhanced segmentation accuracy through hyperparameter tuning and model evaluation

#### February Brain Tumor Segmentation using YOLOv8.

- 2023 Collect data images and annotations file. Visualization data and data processing
  - Converted all mask images to YOLO label format to ensure compatibility with the model's input requirements
  - Trained the model and deployed it on test datasets for evaluation

#### My Certificate of Achievement

**URL** Fundamentals of Deep Learning

**URL** AI/ Machine Learning/ Deep Learning Foundation

## Skills & Background Knowledge

Programming Python, C/C++ Basic, MatLab

Language English: Basic Working Proficiency , Know how to speak Chinese

Framework Tensorflow, Pytorch, Keras, Scikit-learn, YOLO, Matplotlib, OpenCV, Pandas

S/w & Tools Microsoft office, Latex, Docker, CVAT, Git

#### Interests

- Play Sports (Champion of the ETE Cup Football Championship, 2023 and 2024), Listen to music