HONG DUC BUI VINH

(+84) 034 985 5559 | duc.bvh22@gmail.com | linkedin.com/duchong | github.com/ducbvh

EDUCATION

❖ **HCMC University of Technology and Education** *August 2018* - December 2022

B.E. in Mechatronics Engineering Technology, GPA: 3.02/4.00

Relevant Coursework:
- Multivariate Calculus, Linear Algebra, Probability and Statistics
- Digital Image Processing, Artificial Intelligence.

❖ **Kon Tum Nguyen Tat Thanh High School for the Gifted** *2013 - 2018*

Physics class, GPA: 8.9/10

WORK EXPERIENCE

AI Engineer *June 2023 - Present*

FPT Software - AI Valley *Quy Nhon, Vietnam*

- Develop and maintain an AI Assistant that supports explaining legal issues, scientific documents, and internal technology for a department of a South Korean technology company with 1,000 users, utilizing LangChain, Azure, Redis, and FastAPI, etc.
- Develop a web crawler job to process, classify, and summarize content according to the user's desired keywords using LangChain, Bert, Azure OpenAI.
- Design and develop an automated parking payment system end2end with AI/Deep Learning in RealTime: detection, tracking, and recognition of Japanese license plates using Paddle OCR, RT-DETR, ByteTrack.
- Design and develop a content classification module for query sentences. Train a BERT model for content classification, deploy the model, develop the API and processing flow, and package it into a library for high applicability: BERT, Torch, FastAPI, AWS EC2, Triton, etc.

AI Camp - Talent AI Engineer - Grade A *February 2023 - May 2023*

Central Talent Training Academy - FPT Software *Quy Nhon, Vietnam*

- Activities and societies: Research, training, explain and practices deeper in AI/ML/Deep Learning.
- Research and build a Facial-De-occlusion-Network model from scratch using Pytorch, OpenCV, AWS EC2.

AI Engineer/Machine Learning Engineer Intern *February 2022 - December 2022*

Mitek J.S.C *Ho Chi Minh, Vietnam*

Face 3D reconstruction from a single image, MOCAP with Mediapipe Python, OpenCV, Pytorch
- Create data from 3 perspectives each sample from metahuman.
- Texture synthesis with U-net and Pytorch GAN Pix2pix.
- Mocap (Motion Capture) with Mediapipe to Metahuman in Unreal Engine via LiveLink.

Realtime Robotics Vietnam (RtR)   *Ho Chi Minh, Vietnam*

Agricultural Drone detect Crops   Python, OpenCV, Tensorflow

- Collected and labeled data from video captured by drone with LabelImg.
- Retrained SSD MobileNet V2 with Tensorflow API.
- Optimized the models and experimented on JetsonNano, achieving mAP = 42.7, FPS = 20.2.
- Controlled Drone with models and Mission Planner via MAVLink.

Personal Projects   *August 2020 - Present*

Graduate Project: Deaf Support System based on AI   Python, Pytorch

- Research Paper about Sign Language; Action Recognition: I3D, LSTM/GRU, Transformer, Bert.
- Create dataset for Vietnam Sign Language Word-Level.
- Design and deploy robot assistants to help Deaf people communicate in public.

CERTIFICATIONS

Coursera Machine Learning Stanford	*2021*
Coursera Deep Learning Specialization (5 of 5 completed)	*2022*
Udemy Kubernetes for the Absolute Beginners - Hands-on	*2023*
Trainocate AI-102T00 - Designing and Implementing a Microsoft Azure AI Solution	*2024*

SKILLS

Key Skills

- Computer Vision Models, Machine Learning Algorithms, Model Development, NLP, Transformer, Large Language Model (LLM), Clouds, LoRA, QLoRA, ChatGPT, SQL, NoSQL, FastAPI, etc.
- English Toeic 700, Japanese N5.
- Model Deployment, Model Serving, Triton

Technical Skills

- Languages: Python, C++
- Frameworks and Packages: Pandas, Numpy, Scikit-Learn, Tensorflow, PyTorch, FastAPI, HuggingFace.
- Cloud: Docker, Kubernetes, AWS, Azure.