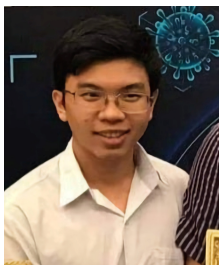
Tô Nhật Huy

AI Engineer

Computer Vision Researcher at MMLab UIT. Experienced with Computer Vision, deploy API and Robot Operating System (ROS). Incorporating robots and cutting-edge Deep Learning/Computer Vision research into practice.



EXPERIENCE

MMLAB-UIT, VNU HCMC, RESEARCH ASSISTANT

05/2020 - PRESENT

Together with other representatives participating to take part in the competitions in the field of AI applied to Computer Vision. Develop several individual research projects and group research projects.

CS-UIT ARTIFICIAL INTELLIGENCE CLUB, CORE TEAM

11/2020 - PRESENT

Organize training sessions, especially knowledge used in practice. Establish & operate student groups for the purpose of instructing self-study, sharing essential skills and knowledge.

HONORS & AWARDS

Euréka Science Fair (National) 2021

Third prize

Our team addressed various challenges in Vietnamese traffic surveillance cameras and proposed a large-scale system to solve the underlying problems. Our science project has achieved third place in the competition against 1100+ other competing projects.

RIVF 2021 MC-OCR (International) 2020

System with Top-1 accuracy

In this competition, we designed an AI framework to extract information from mobile-captured invoice images and achieved state-of-the-art performance when compared to other teams.

AI Hackathon @ AI4VN (National) 2020

System with Most Creative Solution

We built a large-scale collaborative system to help the government identify anomaly events in daily life using data collected from social media.

CONTACT

Phone

(+84) 911 622 286

E-mail

tonhathuy97@gmail.com

EDUCATION

UNIVERSITY OF INFORMATION TECHNOLOGY - VNUHCM | 08/2018 - Present Major: Computer Science GPA: 7.5

SKILLS

AI:

Pytorch, Tensorflow

Data:

SQL, MongoDB

System Designs:

Docker, Kafka.

Scripting:

Bash, Python

Web:

Flask, FastAPI, ReacJS, Ngnix

IoT:

ROS, Jetson, Arduino, Raspberry,

Others:

Paper reading and presentation

PROJECTS

Autonomous Navigation Robot with Face Recognition — *Leader*

Demo: https://shorturl.at/joJKO

Github: https://github.com/tonhathuy/robot-navigation

This is an autonomous navigation robot that moves around campus greeting students by name and giving them essential learning information such as timetables and class schedules.

Main responsibilities:

- Building robot hardware with **jetson nano**, **Arduino** and **Lidar.**
- Building robot software with **ROS.**
- Finetune parameter and balance between performance, computing resources and battery.
- Apply face detection and tracking on jetson nano with **TensorRT.**

Key Information Extraction system from Vietnamese Mobile-Captured Receipts — *Leader*

Demo: https://aiclub.uit.edu.vn/GuruReader/

We have built an end-to-end framework to score receipt quality and extract necessary information of receipt including the seller, timestamp, address, total.

Main responsibilities:

- Training deep learning models, statistics and analyzing results to find the optimal direction.
- The main problem analyzer and visualizations observer.
- Building end-to-end pipeline system with **Text Detection, Text Recognition, Key Information Extraction**.
- Deploy **Microservice** with **FastAPI**, **ReactJS**

Face Recognition System for Surveillance Camera — *Graduation thesis*

Demo: https://shorturl.at/cyBN3

I have built a Face Recognition system for Surveillance Camera. Apply the SOTA methods to face detection and recognition problems. In addition to being able to operate in real-time, my system can also handle numerous cameras simultaneously.

Main responsibilities:

- Survey methods for **Face detection, Face Tracking, Face Recognition**.
- Building end-to-end pipeline system.
- Convert model with **onnx**, **tensorRT** engine to **Triton Server**.

PUBLICATION

Hung.L, **Huy.T**, Hung.A, Khanh.H, Khoa.N, Thua.N, Tien.D, Thanh.D.N, Duy.D.L. (2021). MC-OCR Challenge 2021: An end-to-end recognition framework for Vietnamese Receipts. The 15th IEEE-RIVF International Conference on Computing and Communication Technologies.