



**Loc Huynh Tan**

Date of birth: 11/04/2001

## EDUCATION

**Ho Chi Minh City University of Technology (HCMUT)**

**Current GPA:** 3.85

**Expected:** Oct 2023

## SKILLS

### Language


- Casual English abilities.
- TOEIC: 785


### Digital skills

- **Programming:** C++, Python.
- **System management:** Linux, ROS, Docker, Git.
- **Hardware:** Raspberry Pi, Jetson Nano.
- **Framework:** Keras, Pytorch, Tensorflow.
- **Soft:** LaTeX, Presentation, Teamwork, Communication.
- **Data analysis** with numpy, pandas, ...

## CONTACT

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 <https://github.com/huynhloc04>

## WORK EXPERIENCES

### 02/2022 – CURRENT

**TOW team (AI Research & Robotics club)** – Research Assistant

- Research and develop artificial intelligence modules for robotics and other applications.
- Implement deep learning models (CNNs, RNNs, ...) for document classification, regression tasks, ...
- Optimize post-training models for deployment.
- Deploy models on embeded systems (Jetson Nano).

**Website:** <https://www.techonworld.net/>

**Fanpage:** <https://www.facebook.com/leggedrobotVN>

### 06/2022 – 09/2022 Ho Chi Minh, Vietnam

**MiTek Corporation** - Intern

- Develop and choose Deep Learning models for Pose Estimation tasks.
- Reconstruct 3D pose from skeletons.

## PROJECTS

### Face Analysis

- **Purpose:** A system can recognize and detect detailed data of people.
- **Technologies:** Object detection, object tracking, classification, multi-label, multi-task learning, ONNX, TensorRT, TorchScript, GStreamer/Deepstream.
- **Descriptions:**
  - + Face Analysis detects faces in stream videos.
  - + Uses face tracking and action units to accurately predict 40 attributes such as: gender, emotions, age, ... for the faces in roughly frontal position.
  - + Optimize model for realtime applications.
- **GitHub:** [https://github.com/huynhloc04/Face\\_Analysis](https://github.com/huynhloc04/Face_Analysis)

### Grape Harvesting Robot

- **Purpose:** Determine coordinates of grapes in 3D space.
- **Technologies:** Object detection, object tracking, stereo matching, camera calibration, TensorRT, ROS.
- **Descriptions:**
  - + Compare and choose the best method for grape detection (Image Processing + Clustering or Deep Learning).
  - + Use a stereo camera to capture a pair of images, pass through detection model, track objects, and then calculate depth (distance) from the camera to the objects in real life.
  - + Publish coordinates to ROS topic to control robot for harvesting task.
- **GitHub:** <https://github.com/huynhloc04/LVTN>
- **Demo:** [http://ldp.to/grape\\_harvesting\\_robot](http://ldp.to/grape_harvesting_robot)
- **Auxiliary:** Grape detection using DeepStream: [http://ldp.to/grape\\_deepstream](http://ldp.to/grape_deepstream)

### Others

- **Sentiment Analysis** (Determine the emotional of a message or twist).
- **Face Recognition.**
- ....