# VO HIEP THANH

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# i Summary

Passionate about AI and possessing a natural aptitude for quick learning, I aim to contribute my skills and knowledge as an AI Engineer. With over 1 year of experience in researching and addressing issues in the fields of Computer Vision and Natural Language Processing, I am enthusiastic about creating advanced machine-learning solutions and applying theoretical expertise to tackle practical issues. My commitment to working hard will help the organization reach its targets and achieve success.

## **E**DUCATION

# Ho Chi Minh City University of Technology

B.Eng. in Automatic Control GPA: 8.33/10.0

Luong Van Chanh High School for the Gifted

2016 - 2019

Specialization in Physics

Phu Yen Province  $\overline{\mathbf{Q}}$ 



### Work Experience

### Machine Learning Enginer

Dec 2023 - Present

Delta Cognition - Hybrid

#### **NLP** Researcher Collaborator

Oct 2023 - Present

VietAI - Remote

• Focusing on researching Large Language Models (LLM) currently.

### AI Researcher

Sep 2022 - May 2023

AI VietNam - Remote

Ho Chi Minh City •

- Mainly tackling computer vision and natural language processing problems.
- Focusing on researching skills and diving into Machine Learning/Deep Learning theory to be able to build neural networks from scratch and fine-tune models.

#### **Embedded Linux Intern**

Jun 2022 - Aug 2022

Viettel High Tech - On-site

Ho Chi Minh City •

- Responsibility: building systems for BeagleBone Black, BeagleBone Green Wireless boards using tools from the Yocto Project.
- Technical Skills: Python, C/C++, Linux operating system.

### PROJECTS

#### Pure Decoders For Image Captioning

- Source Code
- Utilizing a pretrained VGG16 model as an encoder to extract features from images.
- Building RNN/LSTM/Transformer decoder from scratch.
- Technical Skills: Pytorch, Python, Linux operating system.

### Text Generation Using Different Decoding Methods With Transfromers

- Source Code
- Used two different decoding methods, greedy search and beam search, to generate text using Transformers.
- Applied the "no-repeat-n-grams" option in the project to prevent the repetition of n-grams.
- Technical Skills: Pytorch, Python, Linux operating system.

### Positioning solution for Automated Guided Vehicle using QR Code

Ho Chi Minh City University of Technology

- Source Code
- Developed an autonomous guided vehicle (AGV) system that utilizes advanced control and computer vision technologies for QR code navigation.
- Designed and integrated hardware components such as a TP-Link wifi modem, Raspberry Pi 4, STM32F407 microcontroller, and Rapoo camera.
- Algorithm: PID, Optical-Flow, Trajectory Planning (trapezoidal velocity).
- Technical Skills: C/C++, Python, OpenCV, Linux operating system.
- Video Demo

### Lung Nodule Segmentation Using ResUnet++

- Source Code
- Research and implement papers:
  - ResUNet++: An Advanced Architecture for Medical Image Segmentation
  - Dual Attention Network for Scene Segmentation
- Technical Skills: Pytorch, Python, Linux operating system.

# SKILLS

Programming Language	Python, $C/C++$
Database Management System	MvSQL, MongoDB

ML/DL Libraries/Frameworks Open-CV, Pytorch, TensorFlow/Keras, Sci-kit Learn, Numpy,

Pandas, Scipy, Matplotlib

ML/DL knowledge/skills Statistics, ML/DL Algorithms, Data preparation for ML model,

Model Development

Soft Skills Research, Teamwork, Problem Solving, Critical Thinking



### AWARDS & ACHIEVEMENTS

#### The Excellence Scholarships

2019-2023

Top 3% GPA of the major and excellent training points

**Odon Vallet Scholarships** 

2018 & 2019

Jan 2010

Viet Nam National Physics Olympiad (VPHO)

Jan 2019 🛗

2nd prize of the National Excellent Student in Physics, organized by the Ministry of Education Training, Vietnam.

### Traditional Olympiad For Southern Provinces

Mar 2017 & Mar 2018

Gold medal of the Southern Olympiad 30/4 in Physics, organized by the Department of Education Training, Ho Chi Minh city, Vietnam



TOEIC 760, IIG Viet Nam

Jun 2022 - Jun 2024



Deep Learning Specialization

Jun 2023 🛗

Taught by Andrew Ng.

Certificate: Deep Learning Specialization

Deep Learning for Computer Vision

July 2023 - August 2023

Taught by Prof. Fei-Fei Li at Stanford University CS231N.

Natural Language Processing with Deep Learning Sep 2023 - Oct 2023

Taught by Prof. Chris Manning at Stanford University CS2224N

REFERENCES

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