

# Luat Gia Khoi Nguyen

Espoo, Uusimaa, Finland +358 415764920 khoi.nlg1910@gmail.com LinkedIn Portfolio

#### **EDUCATION**

**Bachelor Degree, Computer Science**, Ho Chi Minh City University of Technology, Vietnam

Aug 2023

Ranking: Excellence - GPA: 9.09/10.

Double Degree Master's in Data Science, Aalto University - University of Twente

Aug 2023 - Recent

#### **SKILLS**

**Programming Languages** Python, C++

**Frameworks** PyTorch, Tensorflow, Flask, Django etc. Libraries NumPy, Pandas, OpenCV, Pillow, etc.

Cloud AWS EC2, AWS S3

Others Docker, RabbitMQ, CI/CD pipeline

Language proficiency C1 English Level

#### RECOMMENDATIONS

Assoc. Prof. Quan Thanh Tho Email: qtthohcmut.edu.vn

Vice Dean of the Faculty of Computer Science and Engineering, HCMUT

• Dr. Quan Thanh Tho is an Associate Professor in the Faculty of Computer Science and Engineering, at Ho Chi Minh City University of Technology (HCMUT), Vietnam. He graduated with a B.Eng. in information technology from HCMUT in 1998 and a Ph.D. from Nanyang Technological University in Singapore in 2006. His current research interests include formal methods, program analysis/verification, the Semantic Web, machine learning/data mining, and intelligent systems. He currently serves as the Faculty's Vice Dean for Academic Affairs.

#### Dr. Nguyen Chi Hoang

AI R&D Team Leader, FPT Software Da Nang

Email: hoangnc3@fsoft.com.vn

• Dr. Nguyen Chi Hoang is the AI R&D Team Leader at FPT Software Da Nang, Vietnam. Dr. Hoang received a B.Eng. degree in Information Technology at VNU Hanoi-University of Engineering and Technology (VNU Hanoi-UET). He got his Ph.D. degree from Claude Bernard University Lyon 1, France, and completed his "Postdoctoral Researcher" program at French Institute for Research in Computer Science and Automation (INRIA) in 2016. Over the past 9 years, Hoang has been participating in more than 20 projects, providing insightful consultancy for enterprises across sectors and countries on AI adoption strategy. Some of his remarkable works are creating applications to predict the tendency of failure and network utilization for a testbed provider in France and developing software to forecast Nikkei stock prices.

Mr. Vu Hong Chien Director of Quy Nhon AI Research and Application Center (FPT Software Quy Nhon) Email: chienvh1@fsoft.com.vn

 Mr. Vu Hong Chien, born in 1983, became FPT Under 35 in 2017 when he held the position of Head of FQC Department, Quality Assurance Department of FPT Software. After that, he took on the title of Chief Technology Officer (CTO) of FPT Digital Processing Services Company Limited (FPT DPS) before being appointed Director of Quy Nhon Artificial Intelligence Research and Application Center.

#### **WORK EXPERIENCE**

#### **Artificial Intelligence Engineer**

Nov 2021 - Jun 2023

Quy Nhon AI Research and Application Center (FPT Software Quy Nhon)

Quy Nhon, Vietnam

- Developing core models for an AI platform, namely akaOCR.
- Collecting and pre-processing training data.
- Integrating deep learning models into outsourcing projects.

#### **Artificial Intelligence Engineer (Apprenticeship)**

Rever Real Estate Technology Co., Ltd

Nov 2020 - Nov 2022 Ho Chi Minh City, Vietnam

- Researching and proposing solutions, especially in computer vision.
- Collecting and pre-processing training data.
- Implementing deep learning models.
- Integrating and testing deep learning models.

#### **PROJECTS & PRODUCTS**

#### akaOCR @ Quy Nhon AI (FPT Software Quy Nhon)

Nov 2021 - Jun 2023

An Artificial Intelligence (AI) platform for conducting OCR on printed and handwritten documents in multiple languages including English, Vietnamese, Japanese, etc.

- Enhancing the performance of core models in both speed and accuracy.
- Collecting and pre-processing data to retrain deep learning models.
- Integrating core models into package solutions.

#### Table Reconstruction @ Quy Nhon AI (FPT Software Quy Nhon)

Oct 2022 - Jun 2023

An end-to-end pipeline of deep learning models for detecting, recognizing, reconstructing, and transforming tables in documents into spreadsheets.

- Researching, proposing, and developing an end-to-end pipline including table detection/recognition and OCR models.
- Collecting, preparing, and documenting data for retraining and testing.
- Developing a RESTful API for table OCR applications.

#### Financial Statement Analysis @ Quy Nhon AI (FPT Software Quy Nhon)

Apr 2022 - Aug 2022

An application that extracts necessary information from financial statements and transforms them into spreadsheets.

- Researching, proposing, and integrating state-of-the-art deep learning models in table detection and recognition.
- Developing pipeline and rules to parse documents
- Integrating deep learning models into the pipeline.

#### Sign Language Translation Application

Sep 2021 - Dec 2022

An application to translate sign language directly to text using mobile devices' cameras

• Researching and developing deep learning models for hand gesture recognition and classification and Transformer-based models for image-to-text translation.

- Designating and coordinating workflow among team members.
- Communicating with other parties for collaboration.

#### Watermark Removal @ Rever Real Estate Technology Co., Ltd.

Jan 2021 - May 2021

A Deep Learning model to generate watermark-free version of watermarked input images

- Researching and developing generative Autoencoder model to generate watermark-free version of images.
- Augmenting and generating training data for training and evaluation.
- Developing a RESTful API and dockerizing the application.

#### Contract Auto-filling @ Rever Real Estate Technology Co., Ltd.

Jul 2021 - Mar 2022

A tool to OCR text from contracts and auto-fill provided information into them.

- Researching and proposing an OCR method.
- Developing an algorithm to localize texts and correctly fill provided information into blank fields.

#### Duplicate Image Detection @ Rever Real Estate Technology Co., Ltd.

Jun 2021 - Jul 2021

A combined machine learning approach to detect duplication of input images with existing images currently in the database

- Researching and proposing machine learning models
- Building, training, and testing K-means algorithm to optimize processing time.

#### **HONORS & AWARDS**

#### Top 2 Computer Science Graduates, 2019-2023, with Highest GPA

Aug 2023

for ranking as one of the top 2 Computer Science students with the highest overall GPA (9.09/10) among the graduating class of 2019-2023.

## Student with Excellent Achievements in Scientific Research, Academic Competition, and Arts & Culture 2022

Jan 2023

by winning the Consolation Prize in the competition to design and create technology products for people with disabilities held by the Vietnamese Students' Association in 2022.

# Consolation Prize of Designing and Creating Technology Products for People with Disabilities Competition

Ian 2023

for Vietnamese Sign Language Translating Application project

#### Zalo AI Challenge 2022

Nov 2022

About Zalo AI Challenge: Zalo AI Challenge is a prestigious annual competition to empower Vietnam AI engineers' capacity and explore AI technologies to impact Vietnamese lives.

- Researching and proposing solutions.
- Augmenting and preprocessing data.
- Implementing core AI components.

#### Encouragement Scholarship in the semesters 191, 192, 201, 202, 211, 221

2020-2022

with semester GPAs of 4.0 for all of these semesters

### Student with Outstanding Academic Performance in the academic year 2021-2022

Oct 2022

with an overall GPA of 4.0

#### Top 20 and Consolation Prize in Bach Khoa Innovation 2022

Aug 2022

for Vietnamese Sign Language Translating Application project

About Bach Khoa Innovation: an annual competition held by Ho Chi Minh City University of

Technology to promote entrepreneurship and find innovative solutions from university and high school students.

SBA Scholarship 2022 May 2022

for being among 36 students chosen with excellent academic performance, English skills, and growth mindset

#### Advanced Youth of HCMUT following Uncle Ho's words

May 2022

for Excellent Extracurricular Activities and Academic Performance

#### Top 70 of SV STARTUP 2022

Mar 2022

for Vietnamese Sign Language Translating Application project

*About SV STARTUP*: an annual nationwide competition encouraging the spirit of entrepreneurship among students held by the Ministry of Education & Training.

#### Top 20 of USAID BUILD-IT & Dow Vietnam STEM Program: Engineering Projects in

**Community Service** 

Feb 2022

for Vietnamese Sign Language Translating Application project

#### HCMUT Student with 5 Good Merits in the academic years 2019-2020 & 2020-2021

2020, 2021

including Good ethics, Good academic performance, Good health, Good volunteering, and Good integration

#### OISP Student with 5 Good Merits in the academic years 2021-2022

Jan 2022

including Good ethics, Good academic performance, Good health, Good volunteering, and Good integration

#### Swing for Dreams Scholarship in the academic year 2021-2022

Oct 2021

for being among 3 students chosen with excellent academic performance

#### Panasonic Scholarship 2021

Aug 2021

for being among 50 students chosen with excellent academic performance after two rounds of interviews

## **Student with Outstanding Academic Performance in the academic year 2019-2020** with an overall GPA of 4.0

Oct 2020

With all overall GITI of 4.0

### Student with Outstanding Activities in Spring Voluntary Campaign 2020

Mar 2020

for excellent activities in Spring Voluntary Campaign 2020

## Pre-University Scholarship of Ho Chi Minh Communist Youth Union of the Office for

International Study Program, HCMUT

Feb 2020

for excellent Youth Union's activities

#### **EXTRACURRICULAR ACTIVITIES**

# Temasek Foundation Specialist' Community Action and Leadership Exchange (TF-SCALE 2022) at Nanyang Polytechnic Singapore (NYP)

Sep 2022

Vietnamese Student Ambassador

- Being one of 15 chosen students to represent Vietnamese students participating in the program.
- Practicing leadership and teamwork skills with Singaporean students by participating in team projects and outdoor activities.
- Learning Singaporean cultures and the government's master plan.
- Supporting people with disabilities in Bizlink Centre Singapore Ltd.

#### Google Developer Student Club - How-to-AI Series

Oct 2021 - Dec 2022

Technical Speaker, Academic Team Leader

- Preparing topics and content for a five-day series about Artificial Intelligence and career path in the field of AI.
- Collaborating with AI Experts to provide a fireside chat with HCMUT students.

#### Google Developer Student Club - Machine Learning Workshop Technical Speaker, Academic Team Leader

Feb 2021- Mar 2022

- Providing basic knowledge of fundamental concepts and some simple algorithms in Machine Learning for students in HCMUT.
- Collaborating with CoderSchool to convey more in-depth knowledge about Deep Learning.

# **OISP International Festival at Ho Chi Minh City University of Technology** External Relation Organizer

Apr 2020 - May 2020

- Communicating and connecting with international students at the Ho Chi Minh City University of Technology and student clubs from other universities in Ho Chi Minh City.
- Proposing sponsorship and finding sponsors for the event.