LOC-PHAT TRUONG

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RESEARCH INTERESTS

- Computer Vision: Object detection, Object tracking, Behavioral Analysis, Scene Understanding.
- Machine Learning, Deep Learning, Model Calibration, Multimodal Deep Learning, Continual Learning.

EDUCATION

Autonomous University of Barcelona (UAB),

Sep 2024 - Sep 2025

Master in Computer Vision, joint program by UAB, UPF, UPC, UB, UOC

Ho Chi Minh City University of Technology and Education (HCMUTE),

Sep 2015 - Mar 2020

Bachelor of Mechatronics Engineering Technology (4) & Certification of Vocational Education (0.5)

GPA: 7.99/10

HCMUTE

Thesis: Research and Application of Deep Learning Algorithm for Tomato Quality

Classification System - Grade: 9.2/10

RESEARCH EXPERIENCE

Student researcher

Jan 2019 - Mar 2020

Viet Nam

Research Supervisor: Quang-Huy Vu, PhD

- Research topics: lightweight convolutional neural network; image classification; weakly-supervised object localization.
- Conducted experiments with a customized CNN architecture inspired by the inverted residual block from MobilenetV2 and a GradCAM visual explainer followed. The objective was to balance the accuracy and latency in a real time mechatronics system.
- Published a full paper at the IEEE conference GTSD 2020 and acquired the best thesis award in 2020.

PUBLICATIONS

Loc-Phat Truong, Bach-Duong Pham, and Quang-Huy Vu. "A Mobile Deep Convolutional Neural Network Combined with Grad-CAM Visual Explanations for Real Time Tomato Quality Classification System." 2020 5th International Conference on Green Technology and Sustainable Development (GTSD). IEEE, 2020. p. 321-325.

PROFESSIONAL EXPERIENCE

Knorex Pte. Ltd.

Jan 2022 - Oct 2024

Data Scientist

Viet Nam

- Joined as Level 2 (L2), promoted to L3 next year.
- Business problems: ads viewability, click-through rate (CTR), and conversion rate (CVR) optimization for online advertising, operating as both real-time and batch prediction.
- Research topics: online learning, contextual bandit, user-context features interaction, machine learning, tabular deep learning, model calibration.
- Delivered prototypes and deployed deep learning model at a scale of millions of requests per second.
- Coordinated the development and integration of MLOPs concept to the current ML system.

SceneSeer (Startup) (part-time Dec 2019 - Mar 2020)

Dec 2019 - Jul 2021

Core AI Engineer

USA, remote from Viet Nam

• Researched and applied optical character recognition (OCR) to client's products, using PaddleOCR as the core OCR engine.

• Researched and applied latest studies in computer vision to implement several prototypes (fall detection, facial mask detection, multi-object multi-view tracking, etc.) to demonstrate the potential of AI for clients.

TEACHING EXPERIENCE

Ho Chi Minh City University of Technology and Education

Sep 2017 - Dec 2020

Teaching Assistant - 6 semesters

Viet Nam

- AMME131529 Applied Mathematics in Mechanical Engineering
- AUCO330329 Automation Control
- EEEN230129 Electrical & Electronics Engineering

SKILLS

Programming Languages Python (proficient), Linux Bash(proficient), SQL, C/C++

DL frameworks Pytorch, Tensorflow

ML&DS Libraries sklearn, scipy, pandas, polars, matplotlib, opency, librosa

Application skills AWS&GCP (server, storage, API, serverless, data warehouse, etc.), Docker, Git

Writing tools Markdown, HTML, LaTeX

Soft skills Teamwork, Independent Working, Problem Solving, Project Management

Critical Thinking, Presentation and Leadership

Language skills English (C1), Vietnamese (native)

HONORS & AWARDS

The honorable mention at Cough-based Covid-19 Detection Challenge,

2021

Stayed in the top 30 highest scores in both 2 phases of this cough audio classification challenge.

Amazon Web Services Certified Machine Learning – Specialty (certification),

2020

2020

Score: 941/1000 - Issued by: Amazon Web Services Training and Certification.

The best thesis award,

The award for the top highest score thesis of all students graduating this year.

Study Encouragement Scholarship,

2017-2018

The scholarship for outstanding academic performance in the school year 2017-2018.

Provincial Excellence High School Student in Mathematics,

2012

Third prize in a Math competition for excellent students of all high schools in the province.

EXTRACURRICULAR COURSES

Machine Learning Engineering for Production (MLOps) Specialization (4 courses)

Issued by: DeepLearning.AI (Coursera).

Deep Learning Specialization (5 courses)

Issued by: DeepLearning.AI (Coursera).

Machine Learning (1 course)

Issued by: Stanford University and DeepLearning.AI (Coursera).

First Principles of Computer Vision (5 courses)

Issued by: Columbia University (Coursera).

EXTRACURRICULAR ACTIVITIES

Knorex Reviewer's club

Chose a manuscript from the given list, prepared the comment, and conducted a pitch talk internally.

Organized and supervised by Dr. Jin Yiping at Knorex.

The Viet Nam ABU Robocon Contest 2017 and 2018

2017 - 2018

Led a team following the robotic competition's rules and instructions.

Knowledge gained: mechanical-electronic-programming interaction, robot manipulation, trajectory planning, controlling (PID controller), microcontroller programming, robot perceptions (rotary encoder, proximity sensor, line sensor, gyroscope, and accelerometer)

TALKS

Model deployment with Tensorflow Serving - Knorex,

Oct 2022

Technical Training Session for Research & Prototyping Department

Click-Through-Rate(CTR) Prediction - Knorex,

Aug 2022

Technical Training Session for Research & Prototyping Department

Conference paper presentation,

Nov 2020

2020 5th International Conference on Green Technology and Sustainable Development

Paper: A Mobile Deep Convolutional Neural Network Combined with Grad-CAM Visual Explanations for Real Time Tomato Quality Classification System.

REFEREES

Quang-Huy Vu, PhD

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Faculty of International Education,

Ho Chi Minh City University of Technology and Education,

Email: huyvq [at] hcmute.edu.vn

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Head of R&D in Research & Prototyping at Knorex,

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