Tuan-Luc Huynh

Information Technology Faculty, Vietnam National University, Ho Chi Minh City University of Science
Email: htluc@selab.hcmus.edu.vn
Google Scholar: Tuan-Luc Huynh
Webpage: LD'Blog

EDUCATION

VNUHCM - University of Science, Ho Chi Minh City, Vietnam (Aug 2019 - present)
B.S. in Computer Science, GPA: 3.95/4.
Thesis topic: *Efficient Brain Tumor Segmentation using nnUNet*.

RESEARCH EXPERIENCE

Research Assistant, Software Engineering Laboratory (SELAB), Information Technology Faculty, Vietnam National University, Ho Chi Minh City University of Science. (Oct 2022 - Present)

- Perform research-related tasks and assist with ongoing projects.
- Participate in international workshops and collaborate with other researchers.

WORK EXPERIENCE

Data Scientist Intern, The Center of Applied Data Science (CADS), FPT Telecom. (Feb 2022 - Sep 2022)

- Project: *Potential smartphone customers modeling using transaction data*.
- Conducted exploratory data analysis (EDA), data wrangling, and feature engineering on tabular data.
- Developed and fine-tuned models using AutoML frameworks.

SKILLS

Programming languages: Python, C++, C, C#, Java, R.

Tech & Tools: PyTorch, LaTeX, scikit-learn, Optuna, PyCaret, Slurm, Markdown, HTML, CSS, Apache Hadoop, Overleaf, Notion, Excel, PowerPoint, Mendeley, Slicer, Generative Models, Large Language Models.

Hands-on experience in Data Science using AutoML and deep learning frameworks.

PUBLICATIONS

1. Thao Thi Phuong Dao, Tuan-Luc Huynh, Minh-Khoi Pham, Trung-Nghia Le Le, Tan-Cong Nguyen, Quang-Thuc Nguyen, Bich Anh Tran, Boi Ngoc Van, Chanh Cong Ha, and Minh-Triet Tran. **Improving Laryngoscopy Image Analysis through Integration of Global Information and Local Features in VoFoCD Dataset**. *arXiv preprint*, 2023. **(Co-first author; Submitting to *Computers in Biology and Medicine, IF: 6.698*)**
2. Trung-Nghia Le, Tam V Nguyen, Minh-Quan Le, Trong-Thuan Nguyen, Viet-Tham Huynh, Trong-Le Do, Khanh-Duy Le, Mai-Khiem Tran, Nhat Hoang-Xuan, Thang-Long Nguyen-Ho, Tuan-Luc Huynh, et al. **SketchANIMAR: Sketch-based 3D Animal Fine-Grained Retrieval**. *arXiv preprint arXiv:2304.05731*, 2023
3. Tuan-Luc Huynh, Khoi-Nguyen Nguyen-Ngoc, Chi-Bien Chu, Minh-Triet Tran, and Trung-Nghia Le. **Multilingual Communication System with Deaf Individuals Utilizing Natural and Visual Languages**. In *2022 RIVF International Conference on Computing and Communication Technologies (RIVF)*, pages 683–688. IEEE, 2022

4. Jie Qin, Shuaihang Yuan, Jiaxin Chen, Boulbaba Ben Amor, Yi Fang, Nhat Hoang-Xuan, Chi-Bien Chu, Khoi-Nguyen Nguyen-Ngoc, Thien-Tri Cao, Nhat-Khang Ngo, Tuan-Luc Huynh, et al. **SHREC'22 track: Sketch-based 3D shape retrieval in the wild**. *Computers & Graphics*, 107:104–115, 2022
5. Tuan-Luc Huynh, Huu-Hung Nguyen, Xuan-Nhat Hoang, Thao Thi Phuong Dao, Tien-Phat Nguyen, Viet-Tham Huynh, Hai-Dang Nguyen, Trung-Nghia Le, and Minh-Triet Tran. **Tail-Aware Sperm Analysis for Transparent Tracking of Spermatozoa**. 2022 **(Submitted and to be published at CEUR Workshop Proceedings)**
6. Tuan-Luc Huynh, Nhat-Khang Ngo, Phu-Van Nguyen, Thien-Tri Cao, Thanh-Danh Le, Hai-Dang Nguyen, and Minh-Triet Tran. **HCMUS at MediaEval2021: Content-Based Misinformation Detection Using Contextualized Word Embedding from BERT**. In *Working Notes Proceedings of the MediaEval 2021 Workshop, Online*, volume 3181, 2021
7. Nhat-Khang Ngo, Tuan-Luc Huynh, Thanh-Danh Le, Hai-Dang Nguyen, and Minh-Triet Tran. **HCMUS at MediaEval2021: Polyps Segmentation using TransFuse with Focal Tversky Loss**. In *Working Notes Proceedings of the MediaEval 2021 Workshop, Online*, volume 3181, 2021
8. Thien-Tri Cao, Nhat-Khang Ngo, Thanh-Danh Le, Tuan-Luc Huynh, Ngoc-Thien Nguyen, Hai-Dang Nguyen, and Minh-Triet Tran. **HCMUS at MediaEval 2021: Fine-tuning CLIP for Automatic News-Images Re-Matching**. In *Working Notes Proceedings of the MediaEval 2021 Workshop, Online*, volume 3181, 2021

RESEARCH INTERESTS

Machine Learning; Deep Learning; Computer Vision; Self-Supervised Learning; Medical Image Computing.

ACADEMIA SERVICE

Mar 2023, Co-organizers of MediaEval 2023 Medical Multimedia Task.

AWARDS & ACHIEVEMENTS

2023

- Achieved **2nd place** in the Sketch-based 3D Animal Fine-Grained Retrieval Challenge at SHREC 2023.
- Received a **Distinctive Mention** from the organizers of the Medico Medical Multimedia task in MediaEval 2022.

2022

- Awarded the **Academic Excellence Award** from the University of Science for the academic year 2021-2022, ranking among the top five students with the highest GPA in the Advanced Program in Computer Science.
- Received a **Full-tuition scholarship** from the University of Science for the academic year 2021-2022.
- Received a **Certificate of Merit** from the President of Vietnam National University Ho Chi Minh City for outstanding achievements in scientific research during the academic year 2021-2022.
- Received a **Certificate of Merit** from the Principal of Ho Chi Minh City University of Sciences for outstanding achievements in scientific research during term II of the academic year 2021-2022.

2021

- Achieved **1st place** in the NewsImage task and **2nd place** in the FakeNews task at MediaEval 2021.

MAIN COURSES

Data Structures; Introduction to Database Systems; Applied Statistics for Engineers and Scientists; Artificial Intelligence; Algorithms and Complexity; Machine Learning; Introduction to Natural Language Processing; Computer Vision; Introduction to Big Data Analytics; Information Retrieval.

LANGUAGES

Vietnamese *(Native, Bilingual)*, **Cantonese** *(Native, Bilingual)*, **English** *(Fully Professional, IELTS 6.0 (Minimum requirement, test will be taken in July 2023))*, **Mandarin** *(Fully Professional, HSK6 238/300 (2018))*.

HOBBY

Travelling; Landscape photograph; Brewing coffee and tea; Reading manga; Listening to music; Video games.