

Dang Huu Phat

 HuuPhat  danghuuphat  phatd142@gmail.com  0356521948  Ho Chi Minh City


Education

- | | |
|--|----------------------|
| Chu Van An High School for the Gifted, Binh Dinh | Sept 2020 – Jun 2022 |
| ◦ GPA: 9.5/10.0 | |
| University of Information Technology - VNUHCM | Sept 2022 – Jun 2026 |
| ◦ Bachelor's Honors Program in Computer Science | |
| ◦ GPA: 8.95/10.0 | |
| ◦ Coursework: Problem Solving Using Computational Thinking (University of Michigan); Applications of AI for Anomaly Detection (Nvidia) | |




Awards & Achievements

- The First Prize in the Data Science Challenge (DSC) 2023 for Solution of Smart City - Category A
- Consolation Prize in the Artificial Intelligence Challenge (AI Challenge) Competition in 2024.
- Technology for Community Award at Hackdream for Techfuture Hackathon.
- The Third Prize in the National Chemistry Olympiad - 2022
- Scholarship for Admission to the University of Information Technology - VNUHCM
- The Final Round of the Artificial Intelligence Challenge (AI Challenge) Competition in Ho Chi Minh City in 2023,
- TOEIC Listening & Reading Score: 665

Publications

- | | |
|--|----------|
| AViSearch: A Multimodal Video Event Retrieval System via Query Enhancement and Optimized Keyframes | Dec 2024 |
| Nguyen Huu Hoang Long, <i>Huu Phat</i> , Tran Thi Cam Giang, Tran Nhu Cam Nguyen, Phan Hoang Phuoc, Tien-Huy Nguyen | |
| updating  | |

Projects

- | | |
|---|--|
| Jobs analysis and recommendation | github  |
| ◦ Crawl job postings from TopCV and analyze them to extract meaningful insights | |
| ◦ Train a salary prediction model and build a personalized job recommendation system | |
| ◦ Technologies: Data Analysis, Machine Learning, Scikit-learn, Python, Git, LLM API, Streamlit,... | |
| The video query system | github  |
| ◦ Building a system for querying events from a massive video repository using text-based queries. | |
| ◦ It utilizes the CLIP, BLIP,... model to vectorize frames (extracted from videos), which are then used for storage and querying. | |
| ◦ Technologies: Python, Git, AI, Image retrieval,... | |
| Air Quality Monitoring | demo  |
| ◦ Research and develop an AI-powered air quality monitoring system using IoT sensors. | |
| ◦ Engaged over 500 active users across the website platform, Messenger chatbot, and Telegram. | |
| ◦ Showcased as one of the featured products at the 2024 Youth Fest organized by the Vietnam Youth Union. | |
| ◦ Technologies: Apps Script, Cloud Database, Firebase, AWS, HTML/Tailwind CSS, OpenAI API. | |
| RAG Chatbot for Legal Support | |
| ◦ Designed and implemented a Retrieval-Augmented Generation (RAG) chatbot to provide users with quick | |

access to information on legal rights and gender equality.

- Utilized AI to process and retrieve relevant legal documents, improving accessibility for underserved communities.
- Technologies: Apps Script, Google Cloud Agent Builder, AWS, Vertex AI.

Building a dataset and baseline model

in progress

- A multimodal dataset in the field of natural sciences consisting of 20k multiple-choice questions in Mathematics, Physics, Chemistry, and Biology at the high school level
- Empirical evaluation of LLMs and LMMs (close source, open source) on the dataset. Training, evaluation baseline model on the collected dataset
- Tools Used: Python, Torch, Git, LLM, LVLM,..

UCPC Organizing Committee

- UCPC is the largest algorithm programming contest at the University of Information Technology-VNUHCM University.
- Participate in the preparation of problems, and test cases for the contest.
- Tools Used: C++

Technologies

Languages: Python, C++, C, Java, SQL, HTML, CSS, JavaScript.

Technologies: YOLO, easyOCR, LLM model, Git, Docker, PyTorch, TensorFlow, OpenCV, MongoDB, Flask, MySQL.