

Bao Huynh Thai

Student

<https://github.com/tbaro19> (July 2025)

EDUCATION

University of Information Technology, Ho Chi Minh City

- *Bachelor of Science in Artificial Intelligence*

2023 – 2027

GPA: 3.06/4.00

RESEARCH EXPERIENCE

- **Evolutionary Learning & Optimization** Oct 2024 - Present
Research Student
 - **Adversarial Attack:** Conducted research on black-box and white-box adversarial attacks targeting OCR systems, vision-language models (VLMs), and similar AI models to evaluate and improve their robustness.
 - First author, Paper: Adversarial Robustness Evaluation of a Vietnamese Handwriting OCR System.
- **Multimedia Laboratory** Feb 2025 - Present
Research Student
 - **Large Language Models:** Research and development of multimodal systems and pipelines for educational question answering tasks with explainability capabilities.
 - **3D Objects Retrieval:** Research on systems for 3D object retrieval and reconstruction from images and masked 2D inputs.
 - Co-author, Paper: Explainable Large Language Models for Educational Question-Answering: A Multi-Model Ensemble Approach with Structured Reasoning
 - Co-author, Paper: ROOMELSA: Retrieval of Optimal Objects for Multi-modal Enhanced Language and Spatial Assistance
- **Stubborn Strawberries team** Jan 2025 - Present
Research Student
 - **Text to 3D models:** Research and improvement of text-to-3D models; developed pipelines integrating multiple models.
 - **ARM64 CPU Architecture:** Researched performance and addressed emerging issues in ARM64 CPU architecture.

PROJECTS

- **AdvRE-ViHandOCR:** Evaluated the adversarial robustness of a Vietnamese handwriting OCR model against PGD white-box attacks. <https://github.com/tbaro19/AdvRE-ViHandOCR>
- **VNOID:** Scripts to benchmark the performance of large language models (LLMs) using vLLM. Help you measure throughput, latency, and the effect of CPU offloading on inference. <https://github.com/tbaro19/VNOID>

SKILLS / EXPERIENCE

- **Languages:** Python (scikit-learn, NumPy, Pandas, PyTorch, ...), C++ (Arduino IDE).
- **Technical Skills:** Linux, Arduino/Raspberry Pi/Jetson Nano, ARM64 CPU Architecture, Adversarial Attack, Computer Vision, NLP, Genetic Algorithm, ...
- **Teaching Skills:** Lecture Designing, Presentation, Mentoring, Hosting & Reviewing.

HOBBIES

- Research computer science & ARM64 CPU Architecture topics. Play football, table tennis

SOCIAL ACTIVITIES

- Mentor of Science Lab programs: ELECTRAHACK 2023, SIP 2024, ICOHACK 2024, SOFTHACK 2025
- Organizer/Volunteer of Arduino Day Vietnam 2023
- Speak about ARM64 CPU Architecture at Arduino Day Vietnam 2025, HCMC AI Meetup #1 - Menlo Research, OpenInfra & Cloud Native Day Vietnam 2025