Ben Phan

EDUCATION

National Cheng Kung University (NCKU)

Sep 2023 - Aug 2025

Master of Science in Computer Science

- o Advisor: Prof. Jung-Hsien Chiang
- Vice President of the Vietnamese Student Association at NCKU (2024 2025)

Danang University of Science & Technology

Sep 2018 - Mar 2023

Bachelor of Engineering in Control Engineering and Automation

- o Advisor: Ph.D. NGO Dinh-Thanh
- o Class President (2019 2023)
- Vice President of the BK Maker Scientific Research Club (2021 2022)

RESEARCH INTERESTS

My research interests include Artificial Intelligence, Machine Learning, and Deep Learning, with applications in both Natural Language Processing and Computer Vision. I focus on optimizing Large Language Models (LLMs) and other deep learning architectures for efficient deployment on edge devices and servers, aiming to balance performance, scalability, and computational efficiency.

PUBLICATIONS AND SUBMISSIONS

MyMy at SemEval-2025 task 9: A robust knowledge-augmented data approach for reliable food hazard detection

Ben Phan, Jung-Hsien Chiang

Proceedings of the 19th International Workshop on Semantic Evaluation, an ACL Workshop, 2025 2nd Place in Subtask 1 and 2nd Place in Subtask 2, SemEval-2025 Task 9, ACL Workshop.

CAS: enhancing implicit constrained data augmentation with semantic enrichment for biomedical relation extraction and beyond

Fang-Yi Su, Gia-Han Ngo, **Ben Phan**, Jung-Hsien Chiang Journal of Database (Q1), 2025

Optimized biomedical entity relation extraction method with data augmentation and classification using GPT-4 and Gemini

Cong-Phuoc Phan, **Ben Phan**, Jung-Hsien Chiang Journal of Database (Q1), 2024

Probability Model with Ensemble Learning and Data Augmentation for Named Entity Recognition (NER) and Relation Extraction (RE) Tasks

Cong-Phuoc Phan, Gia-Han Ngo, Ben Phan, and Jung-Hsien Chiang

Proceedings of the BioCreative VIII: Curation and Evaluation in the era of Generative Models, 2023 Ranked among the Top 3 overall in the BioCreative VIII Challenge 2023.

Deep learning framework applied for predicting anomaly of respiratory sounds

Dat Ngo, Lam Pham, Anh Nguyen, **Ben Phan**, Khoa Tran, Truong Nguyen International Symposium on Electrical and Electronics Engineering (ISEE), 2021

EXPERIENCE

AI Researcher Tainan, Taiwan

Intelligent Information Retrieval Lab (IIR Lab), CSIE, NCKU

Sep 2023 - Aug 2025

- Developing and refining RAG techniques for enhanced information retrieval.
- Investigating Graph-based RAG models to improve the accuracy and efficiency of retrieval.
- Exploring integration of Large Language Models with retrieval systems to enhance the quality of generated information.

AI Engineer
VinBigData

Hanoi, Vietnam
Nov 2022 - Sep 2023

- Worked on the Camera AI project, developing Face ID, Car Parking, and Uncovered Truck detection for VinFast factories and VinHome, processing data from 2,000+ cameras with GStreamer, DeepStream, TensorRT, and Triton.
- Contributed to the VinFast Smart Factory project, focusing on computer vision, model optimization (QAT, PQT), and deployment using DeepStream, GStreamer, and TensorRT to enhance AI performance in industrial automation.

Vingroup AI Engineer Trainee

Hanoi, Vietnam

Vingroup Big Data Institute

 $Jun \ 2022 - Nov \ 2022$

- Completed courses in Linear Algebra, Probability and Statistics, Machine Learning, Computer Vision, Natural Language Processing, and AI Ethics taught by leading professors and experts.
- Developed essential soft skills, including teamwork, problem-solving, and effective communication, to complement technical expertise.

AI Engineer Internship

Danang, Vietnam

FTECH CO., LTD

May 2021 - Jun 2022

- Gained foundational knowledge of AI, deep learning, and computer vision techniques.
- Acquired hands-on experience with cloud platforms such as Azure and AWS for deploying AI models and services.

Embedded Software Internship

Danang, Vietnam

Software Danang Center

May 2019 - Jun 2020

- Developed IoT-based tracking system for real-time bus movement monitoring in Danang.
- Gained proficiency in C, C++, and Linux environments through embedded software projects.

ACHIEVEMENTS

NCKU Distinguished International Student Scholarship Awarded for Master's program	2023 - 2025
Academic Excellence Scholarship (Top 5%) in UD - DUT Awarded for outstanding academic performance	2023
Selected for prestigious AI training program	2022
▼ 2nd Place in Subtask 1 and Subtask 2, SemEval-2025 Task 9International Workshop on Semantic Evaluation, ACL 2025	2025
Third Prize in USAID BUILD-IT & Dow Vietnam STEM	2023

ACHIEVEMENTS (CONTINUED)

▼ Second Prize in Science Research Awarded by UD - DUT for excellence in scientific research	2022
▼ Second Prize in BK-Techshow Recognized for innovation in BK-Techshow, UD - DUT	2022
▼ Top 20 & Top 8 Digital Transformation Siemens Vietnam SIMATIC contest for smart solutions (2021)	2021
▼ Top 6 & Creativity Award in ABU Robocon Asia-Pacific Robot Contest for automation solutions	2020
Third Prize in ViOlympic Math Competition	2016, 2017
Appropriate Technology at University of Tsukuba, Japan	2021
Amazon BUILD ON Hackathon in AWS ASEAN	2021
♀ Certificate of Merit in COVID-19 Community Service Project	2020
🙎 Learning Express Program Singapore Polytechnic Exchange	2019

LANGUAGES

Vietnamese: Native
English: Advanced
Chinese: Intermediate

SKILLS

Computer Languages: Python, C++, C, Java, Bash, Linux.

Machine Learning Libraries: Pytorch, Tensorflow, Sklearn, Numpy, Triton, TensorRT, DeepStream, Gstreamer, Transformers, Langchain, LLMs, RAG.

Cloud & Tools: AWS & Azure, Docker, Git, Kubernetes.

Soft Skills: Leadership, Presentation, Teamwork, Problem-solving, Critical thinking, Design thinking.

Hobbies: Swimming, Volleyball, Running, Hiking.

REFERENCES

Prof. Jung-Hsien Chiang

Distinguished Professor, Department of Computer Science and Information Engineering, NCKU.

Ph.D. NGO Dinh-Thanh

Lecturer at The University of Danang, University of Science and Technology.