

🛘 (+886) 975-479-678 | 🗷 huangkangyang@cmlab.csie.ntu.edu.tw | 🄏 https://alberthkyhky.github.io/ | 🎓 Kang-Yang Huang

Summary_

Kang-Yang Huang is currently pursuing his master's degree in computer science at National Taiwan University (NTU), where he is a member of the AIMM group in CMLab, supervised by Prof. Wen-Huang Cheng and Prof. Hong-Han Shuai. His research focuses on the intersection of computer vision and deep learning. Initially, he specialized in lightweight deep learning models, but he is now expanding his interests to generative artificial intelligence, particularly in areas such as text-to-image generation (T2I) and visual-language models (VLMs).

Education

National Taiwan University (NTU)

Taipei, Taiwan

Feb. 2023 - Jul. 2025

M.S. IN COMPUTER SCIENCE

- Advisor: Prof. Wen-Huang Cheng
- NTU Lam Research Paper Award and Outstanding Student Scholarship
- Overall GPA: 4.23/4.3
- · Courses: Computer Vision Practice with Deep Learning, Applied Deep Learning, Artificial Intelligence, Deep Learning for Medical Imaging

National Yang Ming Chiao Tung University (NYCU)

Hsinchu, Taiwan

B.S. IN ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

Sep. 2017 - Sep. 2021

- Exchange student at RWTH Aachen University (Germany) from Apr. to Sep. in 2019
- · Academic Achievement Award in 2020 Fall Semester

Publications

Conference Proceedings

- K.-Y. Huang*, J.-Y. Jiang-Lin*, L. Lo, Y.-N. Huang, T. Lin, J.-C. Wu, H.-H. Shuai, and W.-H. Cheng. "ReCorD: Reasoning and Correcting Diffusion for HOI Generation." ACM International Conference on Multimedia (MM), 2024. Poster Presentation [🗗 Paper, 😱 Project Page]
- · H.-H. Chou, R. Xu, K.-Y. Huang, J.-C. Wu, H.-H. Shuai, and W.-H. Cheng. "Dual Memory-Guided Probabilistic Model for Weakly-Supervised Anomaly Detection." International Joint Conference on Artificial Intelligence Workshop (IJCAI W.), 2024. Oral Presentation [Paper]
- · L. Xue, K.-Y. Huang, R. Chao, J.-C. Wu, H.-H. Shuai, Y.-H. Li, and W.-H. Cheng. "Learning Efficient Interaction Anchor for HOI Detection." IEEE International Conference on Multimedia and Expo (ICME), 2024. Oral Presentation [Depar]
- C.-H. Wang, K.-Y. Huang, J.-C. Chen, H.-H. Shuai, and W.-H. Cheng. "Heterogeneous Federated Learning through Multi-branch Network." IEEE International Conference on Multimedia and Expo (ICME), 2021. Oral Presentation [A Paper]

Journal Articles

• C.-H. Wang, K.-Y. Huang, Y. Yao, J.-C. Chen, H.-H. Shuai, and W.-H. Cheng. "Lightweight Deep Learning: An Overview." IEEE Consumer Electronics Magazine (IEEE MCE), 2022. **Best Paper Awards** [A Paper]

Work Experience_

Research Assistant Taipei, Taiwan

RESEARCH CENTER FOR INFORMATION TECHNOLOGY INNOVATION (CITI), ACADEMIA SINICA

Jul. 2020 - Jul. 2021

- Advised by Dr. Jun-Cheng Chen
- · Investigate heterogeneous federated learning.
- Explore <u>adversarial attack and defense</u> strategies for computer vision.
- · Study knowledge distillation techniques.

Projects

Multimodal Interpretable Deepfake Detection

National Taiwan Uni.

SUPPORTED BY NVIDIA ACADEMIC GRANT PROGRAM

Apr. 2025 - Present

Assess the interpretation capabilities of mainstream MLLMs, including GPT-4, Gemini, and LLaVA.

Design <u>MLLMs</u> against malicious usage of generative Al.

Taiwan-LLM Tutor: Large Language Models for Taiwanese Secondary Education

National Taiwan Uni.

APPLIED DEEP LEARNING'S TERM PROJECT ADVISED BY PROF. YUN-NUNG CHEN

[A Slides, C Code]

- Developed a Taiwanese Mandarin LLM using QLoRA and instruction tuning.
- Devised Vision BERT by integrating Roberta and CLIP to perform VQA tasks.

K.-Y. Huang · Résumé APRIL 19, 2025