

Yiyang Huang (He/Him/His)

huang.yiyan@northeastern.edu | +1 781-873-9395 | Personal page | LinkedIn | GitHub | Google Scholar

Education

Northeastern University, Boston, US <ul style="list-style-type: none">Ph.D. in Computer Engineering, advised by Prof. Yun Raymond Fu	Sep 2024 – present
Xidian University, Xi'an, CN <ul style="list-style-type: none">M.S. in Computer Science, advised by Prof. Xuefeng Liang	Sep 2021 – Jun 2024
Xidian University, Xi'an, CN <ul style="list-style-type: none">B.Eng. in Intelligence Science and Technology	Sep 2017 – Jun 2021

Research Interests

Multimodal LLMs, efficiency, and reliability, with a focus on: hallucination detection and mitigation; video understanding; layout understanding.

Experience

Adobe Research, San Jose, US Research Intern Mentor: Zhaowen Wang; Simon Jenni; Jing Shi; <ul style="list-style-type: none">Introduces a novel framework designed to enable Vision-Language Models (VLMs) to understand complex, multi-layered graphic design layouts. While current models excel at simple “atomic” layouts (like forms), they fail to grasp “compositional” layouts where elements interact (e.g., text wrapping, image blending).	May 2025 – Nov 2025
Kyoto University, Kyoto, JP Research Student Mentor: Prof. Takatsune Kumada <ul style="list-style-type: none">Enhanced a multimodal LLM with body language cues, including facial expressions, posture, and gestures, to improve understanding of social interactions. Combined Chain-of-Thought reasoning and cognitive theory to reduce modal bias and improve emotion and intention inference in few-shot in-context learning.	Sep 2023 – Mar 2024

Publications

Preprints and Under Review

- Yiyang Huang**, Yitian Zhang, Yizhou Wang, Mingyuan Zhang, Liang Shi, Huimin Zeng, Yun Fu. “Distorted or Fabricated? A Survey on Hallucination in Video LLMs.” *ARR under-review*.
- Yiyang Huang**, Zhaowen Wang, Simon Jenni, Jing Shi, Yun Fu. “MASON: Compositional Design Layout Understanding in VLMs through Multimodal Alignment and Structural Perception.” *CVPR under-review*.

Peer-Reviewed Publications

- Yiyang Huang**, Liang Shi, Yitian Zhang, Yi Xu, Yun Fu. “SHIELD: Suppressing Hallucinations in LVLM Encoders via Bias and Vulnerability Defense.” *ICLR 2026*. [Paper] [Code]
- Yiyang Huang**, Yizhou Wang, Yun Fu. “D-CoDe: Scaling Image-Pretrained VLMs to Video via Dynamic Compression and Question Decomposition.” *EMNLP 2025 (main)*. [Paper] [Code]
- Shuai Zou, Xuefeng Liang, **Yiyang Huang**. “LipReading for Low-resource Languages by Language Dynamic LoRA.” *ICASSP 2025*. [Paper]
- Yiyang Huang**, Xuefeng Liang, Chaowei Fang. “CALLip: Lipreading using Contrastive and Attribute Learning.” *ACMMM 2021*. [Paper]

Academic Service

Conference Reviewer: ARR, FG

Journal Reviewer: ACM Transactions on Knowledge Discovery from Data (TKDD)

Skills

Languages: Python, C++, Matlab, ~~W~~^L~~A~~^T~~E~~^X.

Tools and libs: PyTorch, Numpy, TorchLighting, Skimage, Scikit-learn.

Awards

- Outstanding Student, Xidian University, China, 2022.
- National Scholarship, China, 2021.
- Undergraduate Computer Design Competition, 1st Prize, China, 2021.
- National Robotic Competition (RoboMaster), 2nd Prize, China, 2019.
- ICRA 2019 AI Challenge, 3rd Prize, 2019.