Weilei He

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Education

Wuhan University(WHU) School of Computer Science — Wuhan, China
Bachelor of Software Engineering — Sept 2021 - Jun 2025
GPA:85/100

Pubs and Preprints

Empowering Reliable Visual-Centric Instruction Following in MLLMs [Paper Link] — Submitted to ACL Rolling Review 3.33 avg.
Weilei He, Feng Ju, Zhiyuan Fan, Rui Min, Minhao Cheng, Yi R. Fung

Cream: Consistency Regularized Self-Rewarding Language Models [Paper Link] — ICLR 2025
Zhaoyang Wang, *Weilei He*, Zhiyuan Liang, Xuchao Zhang, Chetan Bansal, Ying Wei, Weitong Zhang, Huaxiu Yao

HighlightRemover: Spatially Valid Pixel Learning for Image Specular Highlight Removal [Paper Link] — ACM Multimedia 2024
Ling Zhang, Yidong Ma, Zhi Jiang, *Weilei He*, Zhongyun Bao, Gang Fu, Wenjun Xu, Chunxia Xiao

Foreground Harmonization and Shadow Generation for Composite Image [Paper Link] — ACM Multimedia 2024
Jing Zhou, Ziqi Yu, Zhongyun Bao, Gang Fu, *Weilei He*, Chao Liang, Chunxia Xiao

CFDiffusion: Controllable Foreground Relighting in Image Compositing via Diffusion Model [Paper Link] — ACM Multimedia 2024
Ziqi Yu, Jing Zhou, Zhongyun Bao, Gang Fu, *Weilei He*, Chao Liang, Chunxia Xiao

Experience

Research Intern, Graphics and Vision Lab, Wuhan University, Supervisor: **Chunxia Xiao** — Feb 2023 - Dec 2024
- Proposed a transformation module to adaptively learn the valid pixels for feature reconstruction
- Constructed a large real-world highlight dataset

Research Intern, University of North Carolina at Chapel Hill, Supervisor: **Huaxiu Yao** — Apr 2024 - Dec 2024
- Formulated and analyzed the generalized iterative preference fine-tuning frame work for self-rewarding language model.
- Proposed a consistency regularized self-rewarding language model (CREAM) to regularize the self-rewarding training.

Research Intern, Hongkong University of Science and Technology, Supervisor: **Yi R. (May) Fung** — Apr 2025 - Present
- Trustworthy generation of LVLM.

AI Engineer, Wuhan Mercallure Technology Co., Ltd — Jun 2024 - Sept 2024

Skills

English Standard Test: TOEFL:100(R:30, L:22, S:24, W:24)
Programming Languages: Python, C++, Java
Tools: Pytorch, Latex, OpenCV, MySQL, Pytorch-Lightning

Awards

Citibank Cup Financial Innovation Competition, Excellent Prize	2024
Chinese National College Student Art Competition, 1st class, chorus group	2023
Wuhan University Basketball Tournament Champion	2022