Huaqiu Li

$$\label{eq:residence} \begin{split} Residence/domicile: \ \mbox{Tsinghua Shenzhen International Graduate School(SIGS)} \\ E-mail: \ \mbox{lihq23@mails.tsinghua.edu.cn} \ \mbox{\star Tel: (+86)18265139487$} \end{split}$$

Education

Master's degree in Artificial Intelligence Master's degree program GPA: 3.93/4.00 Tsinghua University Sep. 2023 - Now

Research Area: Low-level Vision, Generative model, self-supervised and unsupervised learning

Bachelor's degree in Aircraft Control and Information Engineering

Bachelor's degree program GPA: 3.79/4.00, Rank: 7/256 CET-6: 573, CET-4: 601

Publications

Interpretable Unsupervised Joint Denoising and Enhancement for Real-World low-light Scenarios Li, H., Hu, X., Wang, H. First Author, ICLR2025 Publication

- derives a training strategy based on paired sub-images with varying illumination and noise levels, grounded in physical imaging principles and retinex theory.
- was reported by WeChat official accounts and has been forwarded nearly 1000 times.

Prompt-SID: Learning Structural Representation Prompt via Diffusion for Single Image Denoising Li, H., Zhang, W., Hu, X., Jiang, T., Chen, Z., Wang, H. First Author, AAAI2025 Publication

- proposes a structural prompt generation model based on latent diffusion and design a structural attention module within the transformer-based denoiser architecture to decode the prompt.
- was reported by a WeChat official account and ResearchGate.

LD-RPS: Zero-Shot Unified Image Restoration via Latent Diffusion Recurrent Posterior Sampling Li, H., Wang, Y., Huang, T., Huang, H., Wang, H., Chu, X. First Author, ICCV2025 Under Review

• proposes a novel, dataset-free, and unified image restoration approach through recurrent posterior sampling utilizing a pretrained latent diffusion model.

Measuring and Controlling the Spectral Bias in Self-Supervised Denoising

Zhang, W., Li, H., Hu, X., Chen, Z., Jiang, T., Wang, H.Co-first Author, ICME2025 PublicationSpatiotemporal Blind-Spot Network with Calibrated Flow for Self-Supervised Video Denoising
Chen, Z., Jiang, T., Hu, X., Zhang, W., Li, H., Wang, H.Co-first Author, ICME2025 PublicationMMGenBench: Evaluating the Limits of LMMs from the Text-to-Image Generation Perspective
Huang, H., Wang, Y., Huang, Z., Li, H., Huang, T., Chu, X., Zhang, R.ICCV2025 Under Review

Invited to review for journal TCSVT (Transactions on Circuits and Systems for Video Technology) Internship experience

Vision generation Intern

Alibaba Group, Amap

- Research internship in multimodal models and diffusion models, encompassing but not limited to cross-modal alignment of text and images and AIGC content generation.
- Edge-Side Multimodal Large Language Models (MM-LLMs).
- During the internship, a first-authored paper was submitted to ICCV 2025.

Projects

Embodied Perception and Trustworthy Decision-Making Based on MLLMs Mar. 2025 - Now BYD Auto Industry Company Limited Shenzhen Major Science and Technology Project Responsible for multimodal perception processing (including radar, multi-camera RGB, and IMU inputs) to generate information, or to map the large model's text domain.

Oct. 2024 - Mar. 2025 Beijing, China

Beihang University Sep. 2019 - Jun. 2023

Honors and Awards

Outstanding Graduate of Beijing	2023
Outstanding Student of Beihang University	2023
First Prize in the 13th China College Student Mathematics Competition (Non-Mathematics)	2021
First Prize in the China College Students' Engineering Practice and Innovation Ability Competition	2023
Academic Excellence Scholarship in Beihang	2020, 2021
Beihang University Outstanding Merit Student (Top 5% university-wide)	2020