



Chenfei LIAO

+86-15861472121 | cliao127@connect.hkust-gz.edu.cn |  Github |  Google Scholar

EDUCATION & RESEARCH EXPERIENCE

- **The Hong Kong University of Science and Technology (Guangzhou)** Sep. 2024 - Oct. 2026
M.Phil. in Red Bird Program (Artificial Intelligence), Supervisors: Prof. Xuming Hu & Prof. Yangqiu Song Guangzhou, CHINA
 - Lizhi Innovative Talent Scholarship (**Top 3** in HKUST(GZ))
- **China University of Mining and Technology (Beijing)** Sep. 2020 - Jun. 2024
B.S. in Information Engineering, Supervisor: Prof. Kehu Yang Beijing, CHINA
 - GPA: 3.83/4.00, National Scholarship of China (**Top 1%**)
- **Shanghai Jiao Tong University** Jun. 2025 - Sep. 2025
Visiting Student, Advisor: Prof. Linfeng Zhang Shanghai, CHINA

RESEARCH AREAS

- **Multimodal Perception for Real-world Application**
Including accurate and robust multi-modal perception for robotics, autonomous driving and so on.
 - Multi-modal Perception: Multi-Sensor Robustness Benchmark (**Best Paper Award**, CVPRW2025)/ MemorySAM (arXiv2025)
 - Efficient MLLM: VTC-Bench (ACL2026) / Data-Centric Position (arXiv2025)
- **Panoramic Understanding & Reasoning for Embodied Intelligence**
Including techniques that bridge the gaps between panoramas and normal images.
 - Panoramic Perception: OmniSAM (**Highlight**, ICCV2025)
 - Panoramic Reasoning: OmniCoT (ECCV2026) / Panoramic Affordance Learning (ECCV2026)

SELECTED PUBLICATIONS

C=CONFERENCE, J=JOURNAL, T=TECHNICAL REPORT, P=PREPRINT, *=EQUAL CONTRIBUTION

- [C.1] **Chenfei Liao**, Wensong Wang, Zichen Wen, Xu Zheng, Yiyu Wang, Haocong He, Yuanhuiyi Lyu, Lutao Jiang, Xin Zou, Yuqian Fu, Bin Ren, Linfeng Zhang, Xuming Hu. **Are We Using the Right Benchmark: An Evaluation Framework for Visual Token Compression Methods**. In *ACL Main*. (2026). DOI: 10.48550/arXiv.2510.07143.
- [C.2] Zixin Zhang*, **Chenfei Liao***, Hongfei Zhang, Harold Haodong Chen, Kanghao Chen, Zichen Wen, Litao Guo, Bin Ren, Xu Zheng, Yinchuan Li, Xuming Hu, Nicu Sebe, Ying-Cong Chen. **Panoramic Affordance Prediction**. In *ECCV*. (2026). DOI: 10.48550/arXiv.2603.15558.
- [C.3] Haocong He*, **Chenfei Liao***, Zichen Wen, Zihao Dongfang, Xu Zheng, Bin Ren, Chang Su, Zixin Zhang, Harold Haodong Chen, Hongfei Zhang, Weijia Li, Kailun Yang, Conghui He, Xuming Hu, Nicu Sebe, Linfeng Zhang. **OmniCoT: A Benchmark for Global and Multi-Step Panoramic Reasoning**. In *ECCV*. (2026).
- [C.4] **Chenfei Liao***, Kaiyu Lei*, Xu Zheng, Junha Moon, Zhixiong Wang, Yixuan Wang, Danda Pani Paudel, Luc Van Gool, Xuming Hu. **Benchmarking Multi-modal Semantic Segmentation under Sensor Failures: Missing and Noisy Modality Robustness**. In *CVPR Workshop: TMM-OpenWorld*, **Best Paper Award**. (2025). DOI: 10.48550/arXiv:2503.18445.
- [C.5] Hongfei Zhang*, Harold Haodong Chen*, **Chenfei Liao***, Jing He*, Zixin Zhang, Haodong Li, Yihao Liang, Kanghao Chen, Bin Ren, Xu Zheng, Shuai Yang, Kun Zhou, Yinchuan Li, Nicu Sebe, Ying-Cong Chen. **DVD: Deterministic Video Depth Estimation with Generative Priors**. In *ICML Workshop: Foundations of Deep Generative Models*, **Spotlight**. (2026). DOI: 10.48550/arXiv.2603.12250. (**300+ Github Stars**)
- [C.6] Xu Zheng*, **Chenfei Liao***, Yuqian Fu, Kaiyu Lei, Yuanhuiyi Lyu, Lutao Jiang, Bin Ren, Jialei Chen, Jiawen Wang, Chengxin Li, Linfeng Zhang, Danda Pani Paudel, Xuanjing Huang, Yu-Gang Jiang, Nicu Sebe, Dacheng Tao, Luc Van Gool, Xuming Hu. **MLLMs are Deeply Affected by Modality Bias**. In *ICLR Workshop: MM-Intelligence*. (2026). DOI: 10.48550/arXiv.2505.18657.
- [P.1] **Chenfei Liao**, Xu Zheng, Yuanhuiyi Lyu, Haiwei Xue, Yihong Cao, Jiawen Wang, Kailun Yang, Xuming Hu. **MemorySAM: Memorize Modalities and Semantics with Segment Anything Model 2 for Multi-modal Semantic Segmentation**. (2025). DOI: 10.48550/arXiv.2503.06700.
- [T.1] Zichen Wen*, Yiyu Wang*, **Chenfei Liao***, Boxue Yang*, Junxian Li*, Weifeng Liu*, Haocong He, Bolong Feng, Xuyang Liu, Yuanhuiyi Lyu, Xu Zheng, Xuming Hu, Linfeng Zhang. **AI for Service: Proactive Assistance with AI Glasses**. (2025). DOI: 10.48550/arXiv.2510.14359.

SERVICE

- **Conference Reviewer of:**
@ CVPR Workshop 2025, @ ICCV Workshop 2025, @ ICASSP 2026, @ ICME 2026, @ ICLR Workshop 2026, @ IJCNN 2027
- **Journal Reviewer of:**
@ IEEE Transactions on Circuits and Systems for Video Technology