

XINPENG LI

Dallas, TX 75080, United States

◇ xinpeng.li@utdallas.edu ◇ <https://sampson-lee.github.io/>

SUMMARY

Ph.D. student in Computer Science at UT Dallas (advised by Prof. [Yapeng Tian](#)). My research includes multimodal large language models, audio-visual social signal processing, and dataset/benchmark development for human-centric interaction. I have published papers in ACM MM, IEEE TMM, NeurIPS and released multiple datasets, benchmarks, and open-source systems.

EDUCATION

University of Texas at Dallas, Dallas, TX, U.S.A. *Aug. 2024 - Present*

Doctor of Philosophy in Computer Science

Advisor: Prof. [Yapeng Tian](#)

South China University of Technology, Guangzhou, P.R.China *Sept. 2018 - June 2021*

Master of Engineering in Signal and Information Processing

Advisor: Prof. [Dacheng Tao](#)

South China University of Technology, Guangzhou, P.R.China *Sept. 2014 - June 2018*

Bachelor of Engineering in Information Engineering

RESEARCH EXPERIENCE

Computer Vision and Multimodal Computing Lab, UT Dallas *Aug. 2024 - Present*

Research Assistant

Supervisor: Prof. [Yapeng Tian](#)

- Research on **audio-visual pipelines** for multimodal social interaction datasets, covering speech diarization, active speaker detection, and representation learning
- Developed **LLM-based systems**, integrating conversation forecasting, chain-of-thought reasoning, and agentic tool usage, that operate on raw text, audio and video signals.

MIPS Lab, SZTU & VIP Lab, SUSTech

Jun. 2021 - Jul. 2024

Research Assistant

Mentors: Profs. [Xiaojiang Peng](#), [Feng Zheng](#), [Jinbao Wang](#)

- Led projects on railway detection, emotion recognition and context-aware affective computing (MIPS) and contributed to dataset and benchmark of 3D anomaly detection (VIP, Jan. 23 to Jul. 23)
- Released datasets, benchmarks, and baseline models for railway detection, emotion recognition and anomaly detection, enabling reproducible multimodal research

PUBLICATIONS (SELECTED)

1. **Omni-MMSI: Towards Identity-aware Social Interaction Understanding.**

Xinpeng Li, Bolin Lai, Hardy Chen, Shijian Deng, Cihang Xie, Yuyin Zhou, James M. Rehg, Yapeng Tian.

Submitted to CVPR, 2026.

Introduced a LLM-based framework that reasons with leveraging references and using tools.

2. **Towards Online Multi-Modal Social Interaction Understanding.** [\[PDF\]](#) [\[Code\]](#)

Xinpeng Li, Shijian Deng, Bolin Lai, Weiguo Pian, James M. Rehg, Yapeng Tian.

Submitted to TMLR, 2025.

Proposed a VLM pipeline with forecasting and prompting for online social interaction understanding.

3. **Two in One Go: Single-stage Emotion Recognition with Decoupled Subject-context Transformer.** [\[PDF\]](#) [\[Code\]](#)
Xinpeng Li, Teng Wang, Jian Zhao, Shuyi Mao, Jinbao Wang, Feng Zheng, Xiaojiang Peng, Xuelong Li.
ACM Multimedia, 2024.
Designed a decoupled subject-context transformer for effective visual emotion recognition.
4. **Facial Action Units as A Bridge of Joint Dataset Training for Facial Expression Recognition.** [\[PDF\]](#) [\[Code\]](#)
Shuyi Mao, **Xinpeng Li**, Fan Zhang, Xiaojiang Peng, Yang Yang.
IEEE Transactions on Multimedia, 2024.
Leveraged facial action units as intermediate representations to improve multi-dataset learning.
5. **Real3D-AD: A Dataset of Point Cloud Anomaly Detection.** [\[PDF\]](#) [\[Code\]](#)
Jiaqi Liu, Guoyang Xie, Ruitao Chen, **Xinpeng Li**, Jinbao Wang, Yong Liu, Chengjie Wang, Feng Zheng.
NeurIPS Datasets and Benchmarks Track, 2023.
Released the first real-world 3D point cloud anomaly detection dataset with standardized benchmarks.
6. **Rail Detection: An Efficient Row-based Network and A New Benchmark.** [\[PDF\]](#) [\[Code\]](#)
Xinpeng Li, Xiaojiang Peng.
ACM Multimedia, 2022.
Introduced a new row-based rail detection dataset and proposed an efficient row-based model.

HONORS & AWARDS

Top 11% in Competition on Affective Behavior Analysis in-the-wild (ECCV)	2022
Top 6% in Multimodal Sentiment Analysis Challenge (ACM MM)	2021
Top 9% in Short Video Face Parsing Challenge (CVPR)	2021
Multiple scholarships including National and University-level	2015-2020

ACADEMIC SERVICES

Conference Reviewer:

ACM Multimedia 2024, ACM Multimedia 2023, ICCV 2025, CVPR 2026

Teaching Assistant:

Computer Science II Summer'25, Operating System Fall'25, Operating System Spring'26