Linfei Li

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EDUCATION

Tongji University Shanghai, China
Ph.D. Student in Computer Science, GPA: 90.67/100 09/2023 – Present
Advisor: Prof. Lin Zhang and Prof. Ying Shen

Tongji University Shanghai, China
B.S. in Software Engineering, GPA: 4.79/5.0 09/2019 – 07/2023
Key courses: Computer Vision, Computer Graphics, Data Structure and Algorithm, Programming Language, Operation Systems, Computer Network, Software Engineering

SELECTED PUBLICATIONS

(* indicates equal contributions.)

1. **Linfei Li**, Lin Zhang, Ying Shen. *RealVLG-R1: A Large-Scale Real-World Visual-Language Grounding Benchmark for Robotic Perception and Manipulation.* In ***CVPR***, 2026. (**CCF-A**)
2. Yuchuan Ding*, **Linfei Li***, Lin Zhang, Ying Shen. *RaysUp: Ultra-light Universal Feature Upsampling via Geometry-Aware Ray Representation.* In ***ECCV***, 2026. (**CCF-B**)
3. **Linfei Li**, Lin Zhang, Zhong Wang, Ying Shen. *SmartSplat: Feature-Smart Gaussians for Scalable Compression of Ultra-High-Resolution Images.* In ***AAAI***, 2026. (**CCF-A**)
4. **Linfei Li**, Lin Zhang, Zhong Wang, Fengyi Zhang, Zelin Li, Ying Shen. *Representing Sounds as Neural Amplitude Fields: A Benchmark of Coordinate-MLPs and a Fourier Kolmogorov-Arnold Framework.* In ***AAAI***, 2025. (**CCF-A**)
5. **Linfei Li**, Lin Zhang, Zhong Wang, Ying Shen. *GS3LAM: Gaussian Semantic Splatting SLAM.* In ***ACM MM***, 2024. (**CCF-A**)
6. Zhanbo Shi, Lin Zhang, **Linfei Li**, Ying Shen. *Towards Audio-Visual Navigation in Noisy Environments: A Large-Scale Benchmark Dataset and an Architecture Considering Multiple Sound-Sources.* In ***AAAI***, 2025. (**CCF-A**)
7. **Linfei Li**, Fengyi Zhang, Zhong Wang, Lin Zhang, Ying Shen. *INR-Bench: A Unified Benchmark for Implicit Neural Representations in Multi-Domain Regression and Reconstruction. Technical Report*, 2025.

PROJECTS

National Key R&D Program — Next-Generation AI Beijing, China
Sub-project Technical Lead, Multimodal LLM Cross-Modal Trustworthy Verification 12/2025 – Present

- Led technical roadmap design and core algorithm development for trustworthy cross-modal reasoning in multimodal LLMs.

Changchun Science & Technology Breakthrough Program Changchun, China
Sub-project Technical Lead, Multi-Sensor Fusion-Based AR Navigation Software 01/2025 – 12/2025

- Led camera-IMU-LiDAR joint calibration and multi-sensor fusion framework design for in-vehicle AR navigation.

Tongji University Scenario Validation Program Shanghai, China
Sub-project Technical Lead, Multi-Robot Collaborative Localization and Mapping 11/2024 – 11/2025

- Designed multi-robot SLAM architecture; led pose graph optimization and dense semantic mapping; deployed from simulation to real robots.

ACADEMIC SERVICES

Reviewer: CVPR 2026, NeurIPS 2026, ECCV 2026, AAAI 2025-2026, ICML 2025, MM 2025

AWARDS

- Tongji University Outstanding Doctoral Student Scholarship 2025
- Tongji University Outstanding Doctoral Student 2025
- Outstanding Graduate of Tongji University 2023
- First Prize, National Mathematical Contest in Modeling (Shanghai Division) 2021
- National Endeavor Scholarship 2020, 2021 and 2022
- Tongji Scholarship of Excellence 2020, 2021 and 2022

PROFESSIONAL SKILLS

Tasks & Models: Multimodal Large Language Models, Vision and Language Models, Embodied AI & Robot Manipulation, Visuo-Tactile Perception, Reinforcement Learning for Robotics, Dense Prediction & 3D Reconstruction
Hardware Platforms: Franka Emika Robot Arm, Dexterous Hands, Tactile Sensors, Humanoid Robots, Multi-Sensor Calibration (Camera-LiDAR-IMU)
Programming Languages: Python, C/C++, Java
Tools & Frameworks: HuggingFace, PyTorch, JAX, ROS/ROS2, Isaac Sim, LaTeX