

SELECTED
PUBLICATIONS

1. **Jianglin Lu**, Yuanwei Wu, Ziyi Zhao, Hongcheng Wang, Felix Jimenez, Abrar Majeedi, Yun Fu. Restore-R1: Efficient Image Restoration Agents via Reinforcement Learning with Multimodal LLM Perceptual Feedback, The IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) Findings, 2026.
2. Kuo Yang, **Jianglin Lu**, Yun Fu. Training-Free Cross-Modal Alignment via Anchor Profiles with Statistical Significance Testing, The IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**) Findings, 2026.
3. **Jianglin Lu**, Simon Jenni, Kushal Kaffe, Jing Shi, Handong Zhao, Yun Fu. Seeing Through Words: Controlling Visual Retrieval Quality with Language Models, The Fourteenth International Conference on Learning Representations (**ICLR**), 2026.
4. Qihua Dong, Yang Kuo, Ju Lin, Handong Zhao, Yitian Zhang, Yizhou Wang, Huimin Zeng, **Jianglin Lu**, Yun Fu. Ref-Adv: Exploring MLLM Visual Reasoning in Referring Expression Tasks, The Fourteenth International Conference on Learning Representations (**ICLR**), 2026.
5. **Jianglin Lu**, Hailing Wang, Kuo Yang, Yitian Zhang, Simon Jenni, Yun Fu. The Indra Representation Hypothesis for Multimodal Alignment, Thirty-Ninth Conference on Neural Information Processing Systems (**NeurIPS**), 2025.
6. **Jianglin Lu**, Yixuan Liu, Yitian Zhang, Yun Fu. Scale-Free Graph-Language Models, The Thirteenth International Conference on Learning Representations (**ICLR**), 2025.
7. Hailing Wang, **Jianglin Lu**, Yitian Zhang, Yun Fu. Outlier-Aware Post-Training Quantization for Image Super-Resolution, International Conference on Computer Vision (**ICCV**) **Highlight**, 2025.
8. **Jianglin Lu**, Hailing Wang, Yi Xu, Yizhou Wang, Kuo Yang, Yun Fu. Representation Potentials of Foundation Models for Multimodal Alignment: A Survey, The 2025 Conference on Empirical Methods in Natural Language Processing (**EMNLP**), 2025. (Cited by Prof. **Yoshua Bengio** in the International AI Safety Report 2026)
9. Yixuan Liu, Abel Elekes, **Jianglin Lu**, Rodrigo Dorantes-Gilardi, Albert-Laszlo Barabasi. Unequal Scientific Recognition in the Age of LLMs, The 2025 Conference on Empirical Methods in Natural Language Processing (**EMNLP**) Findings, 2025.
10. **Jianglin Lu**, Yi Xu, Huan Wang, Yue Bai, Yun Fu. Latent Graph Inference with Limited Supervision, Thirty-Seventh Conference on Neural Information Processing Systems (**NeurIPS**), 2023.

OTHER
RESEARCH
PROJECTS

Multimodal Alignment of Foundation Models Feb 2026—Now

Collaborators: Zhenshuo Zhang, Prof. Hongyang R. Zhang **Virtuoso Lab**, Boston, USA

Project: ongoing research on **multimodal alignment** across foundation models.

Post-Training Quantization May 2024—Now

Collaborators: Hailing Wang, Prof. Yun Raymond Fu **SMILE Lab**, Boston, USA

Project I: proposed a PTQ method for image super-resolution, identifying that **activation outliers are crucial for color fidelity**. Introduced a dual-region quantization strategy and sensitivity-aware finetuning, achieving performance comparable to quantization-aware training without retraining while **significantly improving model efficiency (ICCV 2025)**.

Project II: provided a theoretical analysis of quantization perturbations in **MoE LLMs**, designed a **routing alignment** objective and a theoretically grounded **expert quantization strategy** to improve quantization on multiple MoE LLMs (submitted to **ICML 2026**).

LLMs for Scientific Recognition Feb 2024–Aug 2025

Collaborators: Yixuan Liu, Prof. Albert-László Barabási **Barabasi Lab**, Boston, USA

Project I: proposed a **scale-free graph-language model** that unifies graph construction and language modeling via a **scale-free structural prior**, addressing unrealistic edge assumptions and limited supervision in prior GLMs, enabling semi-supervised learning (**ICLR 2025**).

Project II: presented a systematic evaluation of scientific recognition in LLMs and uncover persistent disparities by gender and region (**EMNLP 2025**).

- MANUSCRIPTS UNDER REVIEW
1. **Jianglin Lu**, Hailing Wang, Kuo Yang, Yi Xu, Yun Fu. Degree-Centric Structure Adaptation, 32nd ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**KDD**), 2026.
 2. **Jianglin Lu**, Hailing Wang, Kuo Yang, Yitian Zhang, Yun Fu. Improving Multimodal Alignment for Foundation Models via Indra Representation, IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI 2026**).
 3. Haichao Zhang, Yijiang Li, Shwai He, Tushar Nagarajan, Mingfei Chen, **Jianglin Lu**, Ang Li, Yun Fu. ThinkJEPA: Empowering Latent World Models with Large Vision-Language Reasoning Model, The 19th European Conference on Computer Vision (**ECCV**), 2026.
- PROFESSIONAL SERVICES
- Reviewer for
ICML, NeurIPS, ICLR, CVPR, ICCV, ECCV, AAAI, MM, KDD, ACL, EMNLP, AISTATS
TPAMI, TKDE, TIP, TNNLS, TKDD, PR, NN, MTA, Neurocomputing, Scientific Reports
- HONORS AND AWARDS
- Northeastern Outstanding PhD Teaching Award, 2025
ICCV Travel Award, 2025
ICLR Travel Award, 2025
NeurIPS Scholar Award, 2023
Northeastern PhD Network Travel Award, 2023, 2025
Second Prize of National Graduate Student Mathematical Modeling Competition, 2021 (Top 2%)
China National Scholarships, 2020 (1/400)
- PERSONAL NOTES
- Personal Reading List
Awesome Paper on Representation Alignment
Introduction of Vision-Language-Action Models
Introduction of Vision-Language Models
Introduction of Domain Adaptation
Introduction of Graph Neural Networks
Introduction of Learning with Noisy Labels