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RESEARCH INTEREST	Computer Vision, Machine Learning, Generative Artificial Intelligence Multimodal Understanding & Generation & Reasoning & Retrieval LLMs, MLLMs, Video World Models, Diffusion, Reinforcement Learning, Agentic System	
EDUCATION	Northeastern University , Boston, MA Ph.D. Candidate in Computer Engineering, focusing on Generative AI Advisor: Prof. Raymond Fu (Member of Academia Europaea, ACM/AAAS/IEEE Fellow)	Jan 2023 — Present
INDUSTRY EXPERIENCE	Amazon AGI Foundation , Boston, MA Applied Scientist Intern Research Domain: Video World Models, Diffusion Models, Action-Controlled Video Generation Interactive Video World Model: Built a large-scale Unreal Engine video dataset and training pipeline for action-controlled video generation ; Scaled training from a 1.3B to a 14B bidirectional video diffusion model on 32 NVIDIA B200 GPUs, transformed it into a causal architecture for autoregressive video generation; Applied few-step diffusion distillation for accelerated inference. NEC Laboratories America , Remote Research Scientist Intern Research Domain: Latent Reasoning, Harness Engineering, Vision-Language-Action Models Multimodal Reasoning: Developed a latent visual reasoning system for high-level behavioral reasoning in autonomous-driving videos; Built a unified agentic harness around frozen multi-modal LLMs (GPT-4o/GPT-5.4/Claude Haiku 4.5/Claude Opus 4.7) with composable visual processing, structured parsing, and verifier-guided repair, demonstrating that many model failures can be addressed at the harness level without backbone retraining (arXiv 2026). Amazon AWS , Seattle, WA Applied Scientist Intern Research Domain: LLMs, VLMs, AI Agents, Reinforcement Learning, Low-Level Vision Restore-R1: Developed an end-to-end agentic system for complex image restoration by fine-tuning a VLM (mPLUG-Owl2/DeQA-Score) for quality evaluation, employing an LLM (GPT-4/Llama3) for restoration planning, and training a reinforcement learning policy (PPO/GRPO) on 8 NVIDIA L40S GPUs to optimize tool-execution sequences (CVPR 2026). Adobe Research , San Jose, CA Research Scientist Intern Research Domain: LLMs, VLMs, Multimodal Representation & Retrieval & Recommendation Quality-Controllable Multimodal Retrieval: Built Flickr2.4M, a 2.4 million image-caption training corpus; Developed a multimodal retrieval and recommendation framework integrating LLM-based query refinement with VLM-based text-image matching ; Trained and evaluated GPT2-1.5B/Qwen2.5-0.5B with CoCa/Blip2/OpenCLIP on 8 NVIDIA A100 GPUs, delivering more relevant and visually appealing recommendations (ICLR 2026). Indra Representation Hypothesis: Established a theoretical foundation for multimodal alignment , validated it across vision (ViT/ConvNeXt/DINOv2), language (BERT/RoBERTa), and audio models (Wav2vec/WavLM/HuBERT), showing that independently trained foundation models implicitly converge to a shared relational structure across modalities (NeurIPS 2025).	June 2026—Aug 2026 Full-Time Jan 2026—May 2026 Part-Time May 2025—Aug 2025 Full-Time Sep 2024—Nov 2024 Full-Time

SELECTED PUBLICATIONS	1. [arXiv 2026] Jianglin Lu, Hailing Wang, Xu Ma, Qihua Dong, Mingyuan Zhang, Yizhou Wang, Yun Fu. MUSE: A Unified Agentic Harness for MLLMs. 2. [CVPR 2026] 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. 3. [ICLR 2026] Jianglin Lu, Simon Jenni, Kushal Kafle, Jing Shi, Handong Zhao, Yun Fu. Seeing Through Words: Controlling Visual Retrieval Quality with Language Models. 4. [NeurIPS 2025] Jianglin Lu, Hailing Wang, Kuo Yang, Yitian Zhang, Simon Jenni, Yun Fu. The Indra Representation Hypothesis for Multimodal Alignment. 5. [ICLR 2025] Jianglin Lu, Yixuan Liu, Yitian Zhang, Yun Fu. Scale-Free Graph-Language Models. 6. [EMNLP 2025] Jianglin Lu, Hailing Wang, Yi Xu, Yizhou Wang, Kuo Yang, Yun Fu. Representation Potentials of Foundation Models for Multimodal Alignment: A Survey (cited by Prof. Yoshua Bengio in the International AI Safety Report 2026). 7. [NeurIPS 2023] Jianglin Lu, Yi Xu, Huan Wang, Yue Bai, Yun Fu. Latent Graph Inference with Limited Supervision. 8. [ICCV 2025 Highlight] Hailing Wang, Jianglin Lu, Yitian Zhang, Yun Fu. Outlier-Aware Post-Training Quantization for Image Super-Resolution. 9. [ACL 2026] Hailing Wang, Jianglin Lu, Yitian Zhang, Yun Fu. ACBQ: Adaptive Cross-Block Quantization of Large Language Models. 10. [NeurIPS 2026] 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. 11. [NeurIPS 2026] Ziniu Zhang, Zhenshuo Zhang, Jianglin Lu, Ruoxuan Xiong, Yun Fu, Hongyang R. Zhang. Designing Kernel Surrogate Models for Multimodal Attribution. 12. [ICLR 2026] 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. 13. [EMNLP 2025] Yixuan Liu, Abel Elekes, Jianglin Lu, Rodrigo Dorantes-Gilardi, Albert-Laszlo Barabasi. Unequal Scientific Recognition in the Age of LLMs.
INVITED TALKS	ACLab , Northeastern University, Boston, MA Feb 26th, 2024 Topic: Latent Graph Inference from Shallow to Deep Invited by: Prof. Sarah Ostadabbas
TEACHING	Northeastern University , Boston, MA Teaching Assistant EECE7205 Fundamentals of Computer Engineering Fall 2025 EECE5642 Data Visualization (Outstanding Teaching Award) Spring 2025 DS5220 Supervised Machine Learning Summer 2023, Spring 2024
PROFESSIONAL SERVICES	Reviewer for ICML, NeurIPS, ICLR, CVPR, ICCV, ECCV, AAAI, MM, KDD, ACL, EMNLP, AISTATS TPAMI, TKDE, TNNLS, TIP, TKDD, PR, NEUNET, NEUCOM, IJMLC, MTAP, SIPN
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
SKILLS	Systems & Tools: Linux, Git, Docker, Slurm, AWS, Kubernetes Model Training: SFT, LoRA, RL, distributed training, mixed precision Languages & Libraries: Python, PyTorch, TensorFlow, NumPy, MATLAB, C/C++, OpenCV