Yuting Li

China | yutingli0606@gmail.com | yutingli0606.github.io | github.com/YutingLi0606

Education

Shanghai Jiao Tong University Apr 2026 – Expected Jun 2030

- Ph.D in Computer Science **Supervised by Prof. Weiran Huang**

China Three Gorges University Sep 2018 – Jun 2025

- B.Eng. and M.Eng. in Computer Science

Selected awards and honors

- **Fisrt Place** of Semantic Shift Benchmark (SSB) challenge: Open-Set Recognition Track at **ECCV**, 2024.
- Competition Expert in Kaggle.(**Top 1.8% worldwide**)
- Recipient of Academic Scholarship from China Three Gorges University, 2022–2024.
- **Excellent Graduate** of China Three Gorges University in both 2022 and 2025.

Selected Publications

SURE: SUrvey REcipes for building reliable and robust deep networks. **CVPR 2024**
Yuting Li, Yingyi Chen, Xuanlong Yu, Dexiong Chen†, Xi Shen† **(Accepted)**
Building on SURE, we won 1st place in SSB challenge at ECCV 2024.

HTR-VT: Handwritten Text Recognition with Vision Transformer. **Pattern Recognition 2025**
Yuting Li, Dexiong Chen, Tinglong Tang, Xi Shen† **SCI Q1 (Accepted)**
Over 60 citations within one year of publication.

First SFT, Second RL, Third UPT: Continual Improving Multi-Modal LLM Reasoning via Unsupervised Post-Training. **NeurIPS 2025**
Lai Wei, ***Yuting Li***, Chen Wang, Yue Wang, Linghe Kong, Weiran Huang†, Lichao Sun **(Accepted)**

IDER: IDempotent Experience Replay for Reliable Continual Learning. **ICLR 2026**
Zhanwang Liu*, ***Yuting Li****(Project lead)***, Haoyuan Gao, Yexin Li, Linghe Kong, Lichao Sun, Weiran Huang† **Final average score 8.5/10** **(Accepted)**

Vision Matters: Simple Visual Perturbations Can Boost Multimodal Math Reasoning. **ICML 2026**
Yuting Li, Lai Wei, Kaipeng Zheng, Jingyuan Huang, Linghe Kong, Lichao Sun, Weiran Huang† (Under Review)

Black-box Continual Learning for Vision-Language Models. **ICML 2026**
Yuting Li, Weihang Fang, Haoyuan Gao, Linghe Kong, Yexin Li, Lichao Sun, Weiran Huang† (Under Review)

Research Experiences

Multi-modal LLM reasoning Sep 2024 – Present

Supervised by Prof. Weiran Huang **MIFA Lab, Shanghai Jiao Tong University**

- To address **poor visual integration** in MLLMs during reasoning, proposed a **simple** visual perturbation framework for SFT, DPO, and GRPO, achieving **2–5%** performance gains.
- To address **costly annotation** in multi-modal learning, proposed a fully **label-free** framework achieving **competitive performance with supervised method**.

Continual Learning in real-world scenarios Sep 2024 – Present

Supervised by Prof. Weiran Huang **MIFA Lab, Shanghai Jiao Tong University**

- To address the challenge of **catastrophic forgetting** in continual learning, proposed a **novel experience replay framework** leveraging the idempotent property, achieving **SOTA** performance across sequential tasks.

- To address the lack of **real-world benchmarks**, introduced a black-box continual learning benchmark with a simple and effective baseline and **high-quality** open-source codebase.

Uncertainty estimation in real-world scenarios Sep 2023 – Sep 2024

Supervised by Dr. Xi Shen **Intellindust & Max Planck Institute**

- To address over-confident issues, proposed a **simple and effective** approach named SURE, spanning model regularization, classifier and optimization for building reliable and robust deep networks.
- Achieved **SOTA** performance in **failure prediction** across various datasets and model architectures. Obtained results **comparable to SOTA** models on long-tailed and noisy label benchmarks, **without requiring any task-specific adaptation**.
- Successfully applied SURE to **real-world applications**, including fall detection and fire/smoke detection, **significantly reducing** the false positive rate.

Handwritten Text Recognition Jun 2023 – Sep 2024

Supervised by Dr. Xi Shen **Tencent AI Lab & Intellindust**

- Due to **limited availability of labeled**, developed a simple and **data-efficient** baseline for handwritten text recognition, solely using Vision Transformer and CTC Loss and achieving **SOTA** performance.
- Implemented a clean and **high-quality codebase** that has received positive feedback on GitHub.

Industry Experiences

Intellindust Sep 2023 – Sep 2024

Deep Learning Algorithm Intern **Advisor: Dr. Xi Shen**

- Contributed to the development of algorithms for fall detection and fire/smoke detection cameras.
- Assisted in the development of an automated training platform.

Tencent AI Lab Jun 2023 – Sep 2023

Deep Learning Algorithm Intern **Advisor: Dr. Xi Shen**

- Engaged in dataset engineering tasks including collection, alignment, and noise removal for 3D human motions.
- Contributed to the testing phase of the T2M-GPT project, ensuring code reliability and functionality.

National Clinical Research Center for Cancer Feb 2023 – Jun 2023

Data Science Intern **Advisor: Dr. Hua Jing**

- Performed named entity recognition, relation extraction, and entity alignment on clinical oncology-related data.
- Improved oncology data quality through daily cleaning and iterative rule refinement.

Skills

Programming: Python(Pytorch and Jax), Matlab, HTML, Latex. **Over 250 GitHub stars achieved.**

Language: English: Fluent, French: Elementary, Chinese: Native

Writing: Achieved over 150,000 views on technical blog posts published on CSDN.

Academic Service

Reviewer: CVPR 2025-2026, Pattern Recognition

Presentation: Presentation at CVPR 2024 and ECCV 2024 OOD-CV Workshop (Challenge Winners Session).

Patents

- A training method, device and electronic equipment for image classification model. (CN117994611A)
- A text recognition method and system, corresponding apparatus, electronic device, and computer-readable storage medium. (CN117218638A)