

# Mingyang Shi

smydut@163.com | 139 9858 5576

## EDUCATION

---

2022 - 2026 B.Eng.in Software Engineering at **Dalian University of Technology** (GPA: 90.75/100)  
rank **top6%** Probationary Member of the Communist Party of China

## PUBLICATIONS

---

### **FineWeedX: A Large and Diverse Dataset for Fine-grained Weed Detection**

Zhiyong Wang<sup>†</sup>, **MingYang Shi<sup>†</sup>**, Baoli Sun, Zhihui Wang\*(Under-Review,DB track,rating: 4,4,3)  
The Thirty-Ninth Annual Conference on Neural Information Processing Systems 2025 **CCF-A**

### **Atomic Semantic Alignment with Static-Dynamic Descriptor for Fine-Grained Video Action Recognition**

Baoli Sun, Yixiang Qian, **Mingyang Shi**, Xinzhu Ma, Bowen Yang, Zhihui Wang\*, Zhiyong Wang the  
33rd ACM International Conference on Multimedia **CCF-A**(Under-Review,rating: 6,6,5,5)

### **Fine-Grained Video Action Recognition via Pose-Aware Cross-Modality Knowledge Distillation**

Baoli Sun, Yihan Wang, Xinzhu Ma, **Mingyang Shi**, Zhihui Wang\*, Zhiyong Wang IEEE Transactions  
on Image Processing **CCF-A**(Under-Review)

## PROJECTS

---

### **LightMind — Lightweight Miniature Language Model Principal Investigator**

Developed LightMind, a lightweight LLM training framework (26M parameters) covering the full pipeline from tokenizer construction to DPO alignment. Built on a decoder-only architecture with LoRA, KD, and modular design, enabling full model build deployment in 30 minutes on 4×2080Ti GPUs. Achieved 26.3 on CEval, surpassing GPT-2 Medium by 3% in inference performance.

### **Multimodal Evaluation of Neoadjuvant Chemoradiotherapy Efficacy in Rectal Cancer**

#### **Principal Investigator, National Undergraduate Innovation and Entrepreneurship Project**

Developed an AI-based framework combining MRI (T2WI, DWI) and tumor marker CEA data to evaluate neoadjuvant chemoradiotherapy efficacy in rectal cancer. Integrated MSFE feature extractor, fusion, and adaptive attention modules to align and fuse multimodal data. Achieved Dice coefficient of 0.83, showing high agreement with expert annotations and strong clinical potential.

## COMPETITIONS

---

11/2024	National Scholarship	First Prize
7/2024	National China Robotics and Artificial Intelligence Competition	First Prize
10/2024	National College Students Mathematical Modeling Competition (CUMCM)	First Prize
5/2024	Mathematical Contest in Modeling (MCM)	Honorable Mention
10/2024	Academic Excellence Scholarship, Science and Technology Innovation Scholarship	First Prize

## SKILLS

---

Excellent English Writing	<b>CET 4:649 CET 6:541</b> Proficient in LaTeX (Overleaf)
Familiar with fundamental model	Familiar with YOLO; reproduced Faster R-CNN, YOLOv5/YOLOv8, DiffusionDet; basic understanding of Transformer and CLIP
Sports exercise	Basketball,Running etc.