Kehan Lan

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Education

College of Computer Science and Artificial Intelligence, Fudan University Shanghai, China
B.Eng. in Artificial Intelligence, Honors Class *Sep. 2024 – Present*

- **GPA: 3.97**/4.00; **Rank:** 1/24 in major and 2/358 in college.
- **Selected coursework:** Mathematical Analysis (A), Linear Algebra (A), Probability and Mathematical Statistics (A+), Data Structures (A), Pattern Recognition and Machine Learning (A), Computer Vision (A), Optimization Methods (A), Databases (A), and Computer Architecture (A)
- **English proficiency:** CET-4: 644; CET-6: 622.

Research Interests

Video understanding, multimodal reasoning, generative models, and vision-language agents.

Research Experience

FudanCVL, Fudan University Shanghai, China
Undergraduate Research Assistant; supervised by Prof. Henghui Ding *Mar. 2025 – May 2026*

- Conducted research on video object segmentation and multimodal video reasoning, with an emphasis on anticipation and pixel-level visual grounding.
- Developed FeVOS from task formulation and dataset construction to model training and evaluation, resulting in a first-author paper accepted to **ECCV 2026**.

Publications

FeVOS: Foresight Expression Video Object Segmentation ECCV 2026
Kehan Lan, Kaining Ying, Henghui Ding. [Project] [Paper]

- Introduced foresight expression video object segmentation, requiring models to anticipate future events and segment the relevant objects. Built the FeVOS benchmark and FeVOS-R1, a chain-of-thought SFT and GRPO model that achieves state-of-the-art performance on FeVOS and generalizes to existing RVOS benchmarks.

Selected Projects

FlowEvo: Automated Test-Time Scaling for Flow-Matching Models 2026 – Present

- Built a constrained sampling environment for Stable Diffusion 3.5 Medium with branching, preview, backward refinement, and pruning under a fixed number of function evaluations (NFE).
- Designed an iterative LLM-guided workflow that automatically searches sampling controllers and evaluates reward–compute trade-offs using PickScore and reward–NFE Pareto frontiers.

Honors and Awards

National Scholarship (Top 1%, Highest Honor for Undergraduates) Dec. 2025
First Prize, Shanghai Division, National College Students' Mathematics Competition Dec. 2025

Technical Skills

Programming: Python, C/C++, SQL, LaTeX.

Frameworks and tools: PyTorch, Triton, Hugging Face Transformers, Git, Linux.