Junxian Li

Basic Information

Name	Junxian Li	**Gender**	Male
Date of Birth	2003-5-1	**Country**	China
Tel	(+86) 19913802609	**Education**	Master Student, Shanghai Jiaotong University
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		Links	GitHub; Home Page; Google Scholar

Self- knowledge

I'm a first-year Ph.D. student in Shanghai Jiao Tong University, major in computer science. My research interests are in MLLMs & UMMs, CV and AI Security.

Education

Xi'an Jiaotong University	Undergraduate	Computer Science	2020.09-2024.06
Shanghai Jiao Tong University	Master → Ph.D.	Computer Science	2024.09-now

School Grades

Ranking (undergrad): 3/191 (all students in my major). Average total score: 92.24

Awards and Group Membership

Awards of Competitions:

Provincial third prize of university students' mathematics competition

Provincial third Prize of English Competition for University Students

Scholarship and School awards:

National Scholarship Award (1st year, Shanghai Jiao Tong University)

First-class scholarship at school level in freshman year **(14 students of 1200 won the scholarship)**

Xi'an Jiaotong University · China Guanggu Scholarship, 2021-2022 **(only I won this in my grade)**

English ability

CET-4 score: 610 **CET-6 score: 601** **CET-6 spoken English score: A**

Intern Experience

Artificial Intelligence Engineer(intern) in Huawei Xi'an 2023.07-2023.09

Research intern in Shanghai Artificial Intelligence Laboratory 2024.03-2025.03

Research experiences and publications

Research Interest: MLLMs & UMMs, Computer Vision, AI security

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ChemVLM: Exploring the power of multimodal large language models in chemistry area (2024-03~2024-08)
(First author, accepted by AAAI 2025，CCF-A)
IAG: Input-aware Backdoor Attack on VLM-based Visual Grounding (2025-08~2025-12)
(First author, accepted by CVPR 2026，CCF-A)
Critic-v: Vlm critics help catch vlm errors in multimodal reasoning (2024-09~2024-11)
(co-first author, accepted by CVPR 2025，CCF-A)

S^2 -MLLM: Boosting Spatial Reasoning Capability of MLLMs for 3D Visual Grounding with Structural Guidance. (2025-04~2025-12) **(accepted by CVPR 2026, CCF-A)**

Reinforcement Learning approaches dealing with missing data for traffic control (2022-07～2023-01)
(accepted by IJCAI 2023, CCF-A)
Uncertainty-aware Traffic Prediction under Missing Data (2023-03~2023-07)
(accepted by ICDM 2023，CCF-B)

Biology Instructions: A Dataset and Benchmark for Multi-Omics Sequence Understanding Capability of Large Language Models. (accepted by EMNLP 2025 Findings, CCF-B)

Teaching MLP more graph information: A three-stage multitask knowledge distillation framework (2023-05~2023-10) Arxiv preprint. (First Author)

TOMG-Bench: Evaluating LLMs on Text-based Open Molecule Generation. Arxiv preprint. (co-first author)

Control-R: Towards controllable test-time scaling. Arxiv preprint.

Mol-R1: Towards Explicit Long-CoT Reasoning in Molecule Discovery. Arxiv preprint.

(Two papers under review of ICML 2026 and ECCV 2026, all first author)

Research Topics

Reinforcement Learning Approaches for graph-based data mining. 2022/07-2023/09
In Xi'an Jiao Tong University, directed by Prof. Bin Shi and Assistant Prof. Hua Wei

Vision Language Models in scientific Area. 2024/02-2024/09
In Shanghai Artificial Intelligence Laboratory, directed by Prof. Wanli Ouyang and Dr. Dongzhan Zhou

Reasoning for Vision Language Models 2024/10-present
In Shanghai Artificial Intelligence Laboratory, working with Di Zhang, Ph.D. in Fudan University

AI Security (backdoor attacks, machine-generated text detection) 2023/10-present
In Shanghai Jiao Tong University, directed by Prof. Haojin Zhu

Academic Skills

Proficient in deep learning skills and Python, Pytorch utilization, deep learning algorithms implementation.
Proficient in VLM finetuning and evaluation, especially LlaVA, InternVL, etc. (First-author of an InternVL-based Project.
Proficient in data collection, literature and technical documents reading.
Self-motivated, proficient in driving a project