

# 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	<a href="#">GitHub</a> ; <a href="#">Home Page</a> ; <a href="#">Google Scholar</a>

## Self- knowledge

I'm a first-year master student in Shanghai Jiao Tong University, major in computer science. My research interests are in data mining, LLM (VLM) reasoning and applications, and AI security.

## Education

Xi'an Jiaotong University	Computer Science Undergraduate	2020-08~2024-06
Shanghai Jiaotong University	Computer Science Master	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:** 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 scholarship in this 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: Vision-language Models, Data Mining, LLM Reasoning, AI security**

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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**)

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

**ChemVLM: Exploring the power of multimodal large language models in chemistry area (2024-03~2024-08)**  
(**First author**, accepted by AAI 2025, CCF-A)

Critic-v: Vlm critics help catch vlm errors in multimodal reasoning (2024-09~2024-11) (**co-first author**,  
**accepted as a conference paper in CVPR 2025, CCF-A**)

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

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.

(Additionally, two papers are under review for NeurIPS 2025 and AAI 2026, all CCF-A, first-author)

## Research Topics

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**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

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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