Junyi (Joey) Zhou

junyizhou8-c@my.cityu.edu.hk +852 8497-0886 Homepage LinkedIn Scholar GitHub

Research Summary

My research focuses on **agentic AI**, with the goal of building foundation-model agents that can solve complex real-world tasks. I am particularly interested in scaling **long-horizon agentic tasks and environments**, unlocking agentic capabilities of foundation models through **post-training**, and evaluating **agent performance and reliability** in complex scenarios. Specifically, my research covers:

- **Agentic Data Synthesis and Evaluation.** Real-world task and environment synthesis [1]; skill-grounded evaluation of agent reliability [2].
- **Post-Training and Self-Distillation.** Cross-modal policy transfer for agents [4]; on-policy self-distillation with textual privilege for multimodal models [5].
- **LLM Evaluation and Alignment.** Alignment of model-generated rubrics with human standards [3]; reliable and explainable LLM-as-a-Judge evaluation for RecSystem [6].

I am currently focused on **agentic post-training**—synthesizing realistic tasks and environments from real-world artifacts, and training long-horizon agents on curated trajectories.

Education

City University of Hong Kong *Hong Kong SAR, China*
Ph.D. in Computer Science *Sept. 2025 – Expected Sept. 2029*

- **Advisor:** Prof. Chen Ma; **GPA:** 3.75/4.3; UGC-funded
- **Award:** Outstanding Academic Performance Award for Research Degree Students (2026–2027)

Northeastern University *Shenyang, China*
B.E. in Computer Science and Technology *Sept. 2021 – Jul. 2025*

- **GPA:** 4.024/5.0 (Weighted Average: 90.02/100)
- **Awards:** Outstanding Student Scholarship (2021–2024); Mitacs Globalink Research Internship Award (2024); CUMCM National Second Prize (Top 2.2%, 2023)

Professional Experience

Tencent – WeChat Group (WXG), WeLM Foundation Model Team *Shenzhen, China*
Algorithm / Research Intern *Jun. 2026 – Present*

- Develop a real-world task and environment synthesis framework for agentic post-training, spanning coding, document processing, data analysis, and information retrieval.
- Build a scalable rollout pipeline across agent harnesses to generate and filter over 10,000 executable tasks and 30,000 multi-turn trajectories.
- Evaluate task completion and process adherence with rubric-based judging, and fine-tune agents on selected long-horizon trajectories.

Selected Publications

* indicates equal contribution

[1] **WorkBorne: Discovering Agentic Tasks from Real-World Artifact Transitions** [Under Review at ICLR 2027]
Junyi Zhou, Yufei Wang, Qiyuan Zhang, Chuhan Wu, Zhengxi Li, Wentao Zhao, Jie Zhou, Le Tian, Zhou Xiao, Chen Ma

[2] **SkillForgeBench: Evaluating Agent Reliability Grounded in Agent Skill Specifications** [Under Review at ICLR 2027]
Zhengxi Li*, **Junyi Zhou***, Qiyuan Zhang, Chuhan Wu, Fuyuan Lyu, Le Tian, Zhou Xiao, Chen Ma, Yufei Wang

[3] **RubricBench: Aligning Model-Generated Rubrics with Human Standards** [ACL 2026 Main Conference]
Junyi Zhou*, Qiyuan Zhang*, Yufei Wang, Fuyuan Lyu, Yidong Ming, Can Xu, Qingfeng Sun, Kai Zheng, Peng Kang, Xue Liu, Chen Ma

[4] **Reading is Not Reasoning: Bridging the Agentic Policy Gap in Vision–Text Compression** [Under Review at ICLR 2027]
Cheng Fan, **Junyi Zhou**, Tingzhang Luo, RongJian Xu, Qiyanhui Lu, Mingjian Zhu, Hanting Chen, Jianyuan Guo

[5] **Where to Apply Privilege: On-Policy Self-Distillation with Textual Privilege for Multimodal LLMs** [Under Review at ICLR 2027]
Guoshuai Zou, Zhi Ouyang, Haichao Jiang, Minghong Zhong, **Junyi Zhou**, Ruixuan Wang

[6] **LLM-as-a-Judge for Reliable and Explainable Offline Evaluation in Top-K Recommendation** [KDD 2026 Oral]
Yue Que, **Junyi Zhou**, Xiaokun Zhang, Haiming Jin, Qiao Xiang, Chen Ma

Service

- **Academic Service**
  - Reviewer for *ACL Rolling Review*
  - Reviewer for *Neurocomputing*

Teaching Experience and Mentorship

- **Teaching Assistant**, City University of Hong Kong
  - Natural Language Processing (CS6493), CityU Dongguan
  - Software Design (CS3342), City University of Hong Kong
  - Software Engineering Practice (CS3343), City University of Hong Kong

Skills

Programming: Python **ML/DL:** Transformers, Verl, MS-Swift **AI Tools:** Codex, Claude Code