

Qineng Wang

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Research Interests

- **Embodied Agents:** world modeling, spatial intelligence, decision making.
- **Embodied MLLMs:** large embodied foundation models, 4D world modeling.
- **Language Agents:** multi-agent debate, multi-turn RL agents.

Education

Northwestern University, Evanston, IL

Sep 2024–Present

Ph.D. in Computer Science. **Advisor:** [Manling Li](#). **GPA:** 4.00/4.00.

Zhejiang University, Hangzhou, China

Sep 2020–Jun 2024

B.Eng. in Computer Science and Technology; Minor in ACEE. **GPA:** 3.94/4.00.

Research Experience

Stanford Vision and Learning Lab, Stanford University

Mar 2024–Present

Mentors: [Li Fei-Fei](#), [Jiajun Wu](#), [Ruohan Zhang](#).

Topics: (1) Embodied decision making (EAI). (2) Spatial intelligence ([MindCube](#)). (3) Embodied cognition via world modeling (ENACT).

The Hong Kong University of Science and Technology

Sep 2023–Feb 2024

Mentor: [Yangqiu Song](#).

Topic: Multi-Agent Debate dynamics (CMD).

College of William & Mary

Apr 2023–Feb 2024

Mentor: [Huajie Shao](#).

Topic: Network traffic foundation models.

Publications

* equal contribution; † co-senior/advisors.

1. **ENACT: Evaluating Embodied Cognition with World Modeling of Egocentric Interaction**
[Qineng Wang](#)^{*}, Wenlong Huang^{*}, Yu Zhou, Hang Yin, Tianwei Bao, Jianwen Lyu, Weiye Liu, Ruohan Zhang[†], Jiajun Wu[†], Li Fei-Fei[†], Manling Li[†]
ICLR 2026, under review
2. **What Lies Beyond the View? Actively Constructing Spatial Beliefs in Foundation Models**
Pingyue Zhang^{*}, Zihan Huang^{*}, Yue Wang^{*}, Jieyu Zhang^{*}, Letian Xue, Zihan Wang, [Qineng Wang](#), Keshigeyan Chandrasegaran, Ruohan Zhang, Yejin Choi, Ranjay Krishna, Jiajun Wu, Li Fei-Fei, Manling Li
ICLR 2026, under review
3. **SENTINEL: A Multi-Level Formal Framework for Safety Evaluation of LLM-based Embodied Agents**
Simon Sinong Zhan^{*}, Yao Liu^{*}, Philip Wang^{*}, Zinan Wang, [Qineng Wang](#), Zhian Ruan, Xiangyu Shi, Xinyu Cao, Frank Yang, Kangrui Wang, Huajie Shao, Manling Li, Qi Zhu
ICLR 2026, under review
4. **Activation Steering for LLM Alignment via a Unified ODE-Based Framework**
Hongjue Zhao^{*}, Haosen Sun^{*}, Jiangtao Kong, Xiaochang Li, [Qineng Wang](#), Liwei Jiang, Qi Zhu, Tarek F. Abdelzaher, Yejin Choi, Manling Li, Huajie Shao

ICLR 2026, *under review*

5. **ActionEQA: Action Interface for Embodied Question Answering**
Tianwei Bao*, Qineng Wang*, Kangrui Wang, Mingkai Deng, Guangyi Liu, Zhiting Hu, Eric P. Xing, Manling Li
TMLR, *under review*
6. **Spatial Mental Modeling from Limited Views**
Qineng Wang*, Baiqiao Yin*, Pingyue Zhang, Jianshu Zhang, Kangrui Wang, Zihan Wang, Jieyu Zhang, Keshigeyan Chandrasegaran, Han Liu, Ranjay Krishna, Saining Xie, Manling Li[†], Jiajun Wu[†], Li Fei-Fei[†]
ICCV 2025 (SP4V Workshop), **Spotlight; The Best of ICCV** (featured by Voxel51). [Paper] [Code]
7. **Reinforcing Visual State Reasoning for Multi-Turn VLM Agents**
Kangrui Wang*, Pingyue Zhang*, Zihan Wang*, Yaning Gao*, Linjie Li*, Qineng Wang, Hanyang Chen, Yiping Lu, Zhengyuan Yang, Lijuan Wang, Ranjay Krishna, Jiajun Wu, Li Fei-Fei, Yejin Choi, Manling Li
NeurIPS 2025
8. **RAGEN: A General-Purpose Reasoning Agent Training Framework**
Zihan Wang*, Kangrui Wang*, Qineng Wang*, Pingyue Zhang*, Manling Li
MMLS 2025, **Best Poster**. [Code]
9. **EmbodiedBench: Comprehensive Benchmarking Multi-modal Large Language Models for Vision-Driven Embodied Agents**
Rui Yang*, Hanyang Chen*, Junyu Zhang*, Mark Zhao*, Cheng Qian, Kangrui Wang, Qineng Wang, Teja Venkat Koripella, Marziyeh Movahedi, Manling Li, Heng Ji, Huan Zhang, Tong Zhang
ICML 2025, **Oral (Top 1%)**. [Paper] [Code]
10. **Embodied Agent Interface: Benchmarking LLMs for Embodied Decision Making**
Manling Li*, Shiyu Zhao*, Qineng Wang*, Kangrui Wang*, Yu Zhou*, Sanjana Srivastava, Cem Gokmen, Tony Lee, Li Erran Li, Ruohan Zhang, Weiyu Liu, Percy Liang, Li Fei-Fei, Jiayuan Mao, Jiajun Wu
NeurIPS 2024, **Oral (Top 0.6%)**; SoCal NLP 2024, **Best Paper (Top 0.4%)**. [Paper] [Code]
11. **Rethinking the Bounds of LLM Reasoning: Are Multi-Agent Discussions the Key?**
Qineng Wang*, Zihao Wang*, Ying Su, Hanghang Tong, Yangqiu Song
ACL 2024, Main. [Paper] [Code]

Honors & Awards

- **The Best of ICCV**, Voxel51 2025
- **Best Poster Award**, MMLS 2025
- **Best Paper**, SoCal NLP Symposium 2024
- **McCormick School of Engineering Fellowship (USD 45,000)**, Northwestern University 2024
- **Outstanding Undergraduate Student (Top 10%)**, Zhejiang University 2024
- **Excellent Undergraduate Thesis (Top 2%)**, Zhejiang University 2024
- **Bronze Medal**, Chinese Physics Olympiad (CPhO) 2019

Professional Service

- **Reviewer**: ICLR 2026; AAAI 2026; NeurIPS 2025; ACL 2024
- **Workshop Organizer**: CVPR 2025 FMEA; NeurIPS 2025 EAI Challenge

Invited Talks

- **Shanghai AI Lab**, *Spatial Mental Modeling from Limited Views* (Invited Talk) Jul 2025
- **Qingke AI**, *Spatial Mental Modeling from Limited Views* (Invited Talk) Jul 2025