

EDUCATION

• **University of Southern California**

Bachelor of Science

Aug. 2024 - May 2027
Los Angeles, CA, United States

- Major: Applied and Computational Mathematics
- Minor: Computer Science
- GPA: 3.76/4.00

• **Beijing Royal School**

High School

Sept. 2021 - May 2024
Beijing, China

- Unweighted GPA: 4.19/4.33 (Top 3%)
- Weighted GPA: 4.74/5.0 (Top 3%)

EXPERIENCE

• **Physical Superintelligence Lab, University of Southern California**

Research Assistant

June 2025 - Present
Hybrid

- Conducted research on improving the robustness and reliability of vision-language models through failure analysis and targeted post-training.
- Developed pipelines to generate, filter, and evaluate multimodal data across multiple visual reasoning tasks.
- Analyzed model failures in areas such as object recognition, attributes, spatial relationships, counting, and negation.
- Applied large vision-language models and parameter-efficient fine-tuning methods to investigate targeted model repair and generalization.
- Contributed to an ongoing research project on vision-language model robustness, with results being prepared for workshop submission.

• **Laboratory of Microfabrication, Institute of Physics, Chinese Academy of Sciences**

Research Assistant

May 2023 - Aug. 2023
Beijing, China

- Assisted with microelectronic substrate fabrication for terahertz communication devices using lift-off processes.
- Operated cleanroom equipment including mask aligners, ICPCVD systems, and electron-beam evaporation tools.
- Supported ultra-low-temperature experiments and quantum transport measurements in a laboratory research setting.

PUBLICATIONS

Large Reward Models: Generalizable Online Robot Reward Generation with Vision-Language Models

Yanru Wu, Weiduo Yuan, **Ang Qi**, Vitor Guizilini, Jiageng Mao, Yue Wang

IROS 2026 AI Meets Autonomy Workshop

FuzzingRL: Reinforcement Fuzz-Testing for Revealing VLM Failures

Jiajun Xu, Jiageng Mao, **Ang Qi**, Weiduo Yuan, Alexander Romanus, Helen Xia, Vitor Campagnolo Guizilini, Yue Wang

Under Review

SELECTED COURSEWORK

- **Mathematics**: MATH-226: Calculus III, Math-225: Linear Algebra and Linear Differential Equations, MATH-407: Probability Theory, MATH-432: Applied Combinatorics, MATH-408: Mathematical Statistics, MATH-430: Number Theory, MATH-458: Numerical Methods (Fall 2026), MATH-446: Data Science with Python (Fall 2026)
- **Computer Science**: CSCI-103: Introduction to C++, CSCI-170: Discrete Methods in Computer Science, ITP-168: Introduction to MATLAB, CSCI-104: Data Structures, CSCI-270: Introduction to Algorithms and Theory of Computing, CSCI-360: Artificial Intelligence: Principles and Foundations, CSCI-467: Foundations of Machine Learning (Fall 2026), TAC-216: Applied Python (Fall 2026)

TECHNICAL SKILLS

- **Programming Languages:** C++, Python, Java, MATLAB, R
- **Frameworks & Libraries:** PyTorch, NumPy
- **Technical Skills:** Git, Linux, L^AT_EX, PEFT/LoRA

HONORS AND AWARDS

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|---|-------------------------------|
| • Academic Achievement Award
<i>University of Southern California</i> | Fall 2025, Spring 2026
[🌐] |
| • Outstanding Graduate (Scholarship 50,000 RMB)
<i>Beijing Royal School</i> | 2024 |
| • High Distinction
<i>Australian Science Olympiads Physics</i> | 2022
[🌐] |

ADDITIONAL INFORMATION

Languages: Mandarin (Native), English (Proficient)