Luzhe Sun

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RESEARCH INTEREST

- Diffusion models in action planning, state estimation and trajectory planning
- Embodied grounding with foundation models in unstructured environments
- Multi-modal reasoning, robotic learning and planning

Overall GPA: 3.74/4.00 Major GPA: 3.92/4.00 Ranking:4/125

EDUCATION BACKGROUND

Toyota Technological Institute at Chicago	Chicago, US
Ph.D. Student in Computer Science	Sept 2023 - Present
University of Chicago	Chicago, US
Master Program in Computer Science GPA: 3.77/4.00	Sept 2021 - Mar 2023
Xiamen University	Xiamen, China
Bachelor of Software Engineering, Graduate with Honor	Sept 2017 - Jul 2021

PUBLICATIONS

- "Joint Gravity Stability Prediction for Construction via Diffusion" In submission ICRA 2025 Luzhe Sun*, Takuma Yoneda*, Samuel W. Wheeler, Tianchong Jiang, Matthew R. Walter
- "Efficient Open World Reasoning with Multimodal Localization" In submission ICRA 2025 Luzhe Sun, Jiading Fang, Jiawei Zhou, Matthew R. Walter
- "To the Noise and Back: Diffusion for Shared Autonomy" RSS 2023
 Takuma Yoneda, Luzhe Sun, Ge Yang, Bradly Stadie, Matthew R. Walter
- "Decompositional Quantum Graph Neural Network"
 Xing Ai, Luzhe Sun, Junchi Yan, Zhihong Zhang and Edwin Hancock

AWARDS & ACHIEVEMENTS

Honored Graduates Student, Xiamen University	2021
• National Scholarship (TOP 0.2% nationwide), Chinese Ministry of Education	2020
• National Scholarship (TOP 0.2% nationwide), Chinese Ministry of Education	2019
National Second Prize of China Undergraduate Mathematical Contest in Modeling	2019
National Third Prize of China Students Service Outsourcing Competition	2019
 Huang Xilie Scholarship of Xiamen University in 2019 (2/200) 	2019
The First Prize Scholarship, Xiamen University	2018
Xiamen University Social Work Scholarship	2018

SKILLS

- **Programming**: Python, C/C++, SQL, HTML
- Coding Frameworks: PyTorch, TensorFlow, SpringBoot, Quantum Computing
- Tools/Plateform: Git, Docker, Xcode, MATLAB, Navicat, Unity, Postman

PROFESSIONAL SERVICE

TTIC Summer Workshop on Multimodal Artificial Intelligence	2024.08 — Organizer
Midwest Robotics Workshop	2024.04 — Volunteer
Girls who code	2023.10 — Volunteer
4th China "Internet +" College Studentsand Entrepreneurship Competition	2018.10 — Volunteer

[Updated 2024.08.16]