Hanqing Wang

Shanghai | wanghanqing0424@gmail.com | +86 15174381698 | Homepage

Education

Huazhong University of Science and Technology, BS in Automation — Sept 2020 – June 2024

- GPA: 3.78/4.0 (14%)
- **Coursework:** Deep Learning, Machine Learning, Data Science
- TOFEL:85

Hong Kong University of Science and Technology(GZ), Master of Philosophy — Sept 2025 – June 2027

Publications

SeqAfford: Sequential 3D Affordance Reasoning via Multimodal Large Language Model

- CVPR 2025,**First Author**(co-author);
- Using the world knowledge of the multi-modal large model to assist the affordnace inference of objects, a multi-scale feature fusion module and a lightweight decoder are designed, and the 3D object affordance segmentation is carried out through fine-tune llava

Draw with Thought: Unleashing Multimodal Reasoning for Scientific Diagram Generation

- ACM MM 2025;**Third Author**
- Constructing Dataset and benchmark, evaluating the scientific diagram generation ability of MLLMs

DAG: Unleash the Potential of Diffusion Model for Open-Vocabulary 3D Affordance Grounding

- Under Review , **First Author**(co-author);
- We unleash the powerful affordance knowledge within diffusion model for 3D affordance grounding

SDEval:Safety Dynamic Evaluation for Multimodal Large Language Models

- Under Review ,**First Author** ;
- We design a dynamic evaluation protool for MLLM safety evaluation.

Affordance R1: Reinforcement Learning for Generalizable Affordance Reasoning in Vision-Language Models

- Under Review, **First Author**;
- We propose affordance r1, a reasoning mllm for affordance grounding.

HOID-R1: Reinforcement Learning for Open-World Human-Object Interaction Detection Reasoning with Multimodal Large Language Model

- Under Review, **First Author(co-author, Project Leader)**;
- We introduce the first reinforcement learning paradigm that integrates a chain-of-thought reasoning process directly into HOI detection, enabling the model to decompose complex interaction queries into a sequence of sub-reasoning steps.

Cultural Palette: Pluralising Culture Alignment via Multi-agent Palette

- Under Review, **Fifth Author**;
- We propose a multi-agent framework, which enhances LLMs' cultural sensitivity by integrating five continent-level agents for drafting with a Meta Agent for country-aligned response.

Research Experience

ShangHai Artificial Intelligence Lab — 2025.04-2025.09

- Research Intern: MLLMs, Safety
- ResearchEval Team; Team Leader: Guangtao Zhai ; Mentor: Xiangyang Zhu

ShanghaiTech University — 2024.07-2025.04

- Research Assistant: MLLMs, Embodied AI, 3D Vision
- Advised by Prof. Jingya Wang and Prof. Jingyi Yu

Projects

Multi-modal fusion target detection and localization based on lidar and depth camera

- National College Student Innovation and Entrepreneurship Project , **Project Leader**
- Non-repetitive LiDAR is used to obtain more detailed data, combined with RGB-D information from depth cameras for fusion and then perform target detection

Reasoning Based 3D Part Segmentation

- Graduation project, **A level**
- The inferential Q&A dataset is constructed, the algorithm part-slip is improved, and the SAM module is added in its processing stage to obtain more fine-grained segmentation results

Competition

China University Robot Competition(ROBOCON),First Prize July 2023

- Machine Vision Group Leader
- A deep learning algorithm is introduced to track the movement of the target and combine it with lidar for target detection

China University Robot Competition(ROBOCON),First Prize July 2022

- Machine Vision Group Member
- The depth camera Kinect is used to identify objects with special color information on the field, and the lidar is used to fit the square table for repositioning

China University Intelligent Robot Creative Competition,First Prize Aug 2022

- Group Member

Siemens Cup China Intelligent Manufacturing Challenge, Second Prize Aug 2023

Awards

Outstanding Graduate HUST,2024
Excellent Student Cadre HUST,2023
Excellent Communist Youth League Member HUST,2022
Outstanding innoX Member Shenzhen innoX,2022
Science and Technology Innovation Scholarship HUST,2021
Scholarship for Communite Engagement HUST,2021

Hobbies

Hiking; Basketball; Cycling; Photography