

Hongyi Jing

Email: jhy906219458@gmail.com

EDUCATION

University of Southern California (USC), Los Angeles, United States

September 2024 - June 2026

Master of Science, USC Viterbi School of Engineering

Major: Computer Science

Huazhong University of Science and Technology (HUST), Wuhan, China

September 2020 - June 2024

Bachelor of Science, School of Artificial Intelligence and Automation

Major: Artificial Intelligence; **Cumulative GPA:** 3.90/4.0

PUBLICATIONS (* INDICATES EQUAL CONTRIBUTION.)

- Zhenyu Zhao*, **Hongyi Jing***, Xiawei Liu, Jiageng Mao, Abha Jia, Hanwen Yang, Rong Xue, Sergey Zakharov, Vitor Guizilini and Yue Wang. "Humanoid Everyday: A Comprehensive Robotic Dataset for Open-World Humanoid Manipulation", *ICRA 2026*, under review.
- Yuwen Tan, Xiang Xiang, Yifeng Chen, **Hongyi Jing**, Shiyang Ye, Chaoran Xue and Hui Xu. "Coupling Bracket Segmentation and Tooth Surface Reconstruction on 3D Dental Models", *MICCAI 2023*, published.

RESEARCH EXPERIENCES

Humanoid Manipulation Learning and Evaluation

December 2024 – September 2025

Research Assistant; Advisor: Prof. Yue Wang from USC

Lab: Geometry, Vision, and Learning (GVL) Lab¹, University of Southern California

- Presented Humanoid Everyday, a diverse and multi-modal humanoid manipulation dataset comprising 10.3k trajectories with an optimized teleoperation pipeline.
- Conducted an analysis of the performance of representative policy learning models on Humanoid Everyday, including imitation learning and VLA models, highlighting their strengths and limitations.
- Built a cloud-based evaluation platform that allows researchers to seamlessly deploy their policies in our controlled setting and receive performance feedback.

Large Language Model in Chemistry

July 2023 – April 2024

Research Assistant; Advisor: Prof. Xiangliang Zhang from Notre Dame

Lab: Machine Intelligence and Knowledge Engineering (MINE) Lab², University of Notre Dame

- Explored the application of large language models (LLMs) in solving diverse chemical problems, including reaction prediction, relation extraction, and named entity recognition.
- Evaluated the capability boundaries of LLMs in chemical information extraction tasks, comparing their performance against specialized models to analyze the advantages and shortcomings of LLMs in chemical tasks.
- Revisited and improved the existing evaluation metrics for LLMs in scientific information extraction, and establish a comprehensive system for evaluating the chemical capabilities of LLMs.

3D Dental Model Segmentation and Reconstruction

August 2022 – March 2023

Research Assistant; Advisor: Prof. Xiang Xiang from HUST

Lab: Human-AI Interaction and Visualization (HAIV) Lab³, HUST

- Employed deep learning networks and projection-based surface reconstruction to develop an efficient approach for tooth segmentation and 3D reconstruction in orthodontic treatment.
- Designed a graph-based network for bracket segmentation on 3D dental models, and performed post-processing after bracket segmentation to optimize tooth edges to remove inaccuracies and enhance surface smoothness.
- Implemented 3D dental model reconstruction after bracket removal by projecting the dental surface onto a 2D plane, repairing it based on curvature information, and re-projecting it onto the original 3D tooth surface.

ADDITIONAL INFORMATION

- Programming: Python, C, C++, MATLAB
- Research Interests: Robotics, Dexterous Loco-Manipulation, Whole-Body Control, Vision-Language Models.

¹ Official website of GVL Lab is available at: <https://usc-gvl.github.io/>

² Official website of MINE Lab is available at: <https://sites.nd.edu/xiangliang-zhang/>

³ Official website of HAIV Lab is available at: <https://haivlab.wixsite.com/home>