Wensi Ai

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Research Interests

Human-centered Robotics, Embodied AI, Human-Robot Interaction.

Education

2023 - Present Stanford University - Stanford, CA

M.S. in Computer Science. GPA 4.18

2019 – 2023 University of California, Los Angeles (UCLA) – Los Angeles, CA

B.S. in Computer Science and Applied Mathematics. GPA 3.93

Selected coursework

- *Computer Science*: Data science fundamentals, Deep learning in computer vision, Algorithms and Complexity, Computer architecture, Software engineering, Computer networks, Operating system principles, Automata theory.
- *Mathematics*: Linear Algebra, Real & complex analysis, Numerical methods, Discrete mathematics, Differential equations, Scientific computing, Mathematical modeling.
- Statistics: Machine learning, Probabilistic decision making, Linear models.

Experience

2022 - Present Stanford Vision and Learning Lab (SVL)

Research Assistant | Advisors: Fei-Fei Li, Jiajun Wu.

Research on building simulation platforms for robotics learning.

2023 - Present Stanford Neural Prosthetics Translational Lab (NPTL)

Research Assistant | Advisors: Jaimie Henderson.

Research on building an intracortical brain computer interface (iBCI) for robot control.

2019 - 2022 Center for Vision, Cognition, Learning, and Autonomy (VCLA)

Research Assistant | Advisors: Song-Chun Zhu, Ying Nian Wu.

Research on synthesizing character animations with social affordance.

2021 Metabit Trading

Software Engineer Intern

Optimizing daily stock data generation workflow using Apache Airflow.

Honors and awards

- 2022 Latin Honor of Magna Cum Laude, UCLA School of Engineering
- 2022 Department Honors, UCLA Mathematics

Publications

2024 BEHAVIOR Vision Suite: Customizable Dataset Generation via Simulation

Yunhao Ge*, Yihe Tang*, Jiashu Xu*, Cem Gokmen*, Chengshu Li, <u>Wensi Ai</u>, Benjamin Jose Martinez, Arman Aydin, Mona Anvari, Ayush K Chakravarthy, Hong-Xing Yu, Josiah Wong, Sanjana Srivastava, Sharon Lee, Shengxin Zha, Laurent Itti, Yunzhu Li, Roberto Martín-Martín, Miao Liu, Pengchuan Zhang, Ruohan Zhang, Li Fei-Fei, Jiajun Wu *CVPR 2024*

2024 TeleMoMa: A Modular and Versatile Teleoperation System for Mobile Manipulation

Shivin Dass, <u>Wensi Ai</u>, Yuqian Jiang, Samik Singh, Jiaheng Hu, Ruohan Zhang, Peter Stone, Ben Abbatematteo, Roberto Martín-Martín

RSS 2024 DGR Workshop

ICLR 2024 MoMa Workshop

2023 NOIR: Neural Signal Operated Intelligent Robot for Everyday Activities

Ruohan Zhang*, Sharon Lee*, Minjune Hwang*, Ayano Hiranaka*, Chen Wang, <u>Wensi Ai</u>, Jin Jie Ryan Tan, Shreya Gupta, Yilun Hao, Gabrael Levine, Ruohan Gao, Anthony Norcia, Li Fei-Fei, Jiajun Wu

CoRL 2023

2023 ARNOLD: A Benchmark for Language-Grounded Task Learning With Continuous States in Realistic 3D Scenes

Ran Gong*, Jiangyong Huang*, Yizhou Zhao, Haoran Geng, Xiaofeng Gao, Qingyang Wu, Wensi Ai, Ziheng Zhou, Demetri Terzopoulos, Song-Chun Zhu, Baoxiong Jia, Siyuan Huang *ICCV 2023*

2023 Quantifying the Effect of Visual Impairments on Daily Activities in Virtual, Interactive Environments

Wensi Ai, Sharon Lee, Li Fei-Fei, Jiajun Wu, Ruohan Zhang CogSci 2023

2022 BEHAVIOR-1K: A Human-Centered, Embodied AI Benchmark with 1,000 Everyday Activities and Realistic Simulation

Chengshu Li*, Ruohan Zhang*, Josiah Wong*, Cem Gokmen*, Sanjana Srivastava*, Roberto Martín-Martín*, Chen Wang*, Gabrael Levine*, Wensi Ai*, Benjamin Martinez, Hang Yin, Michael Lingelbach, Minjune Hwang, Ayano Hiranaka, Sujay Garlanka, Arman Aydin, Sharon Lee, Jiankai Sun, Mona Anvari, Manasi Sharma, Dhruva Bansal, Samuel Hunter, Kyu-Young Kim, Alan Lou, Caleb R Matthews, Ivan Villa-Renteria, Jerry Huayang Tang, Claire Tang, Fei Xia, Yunzhu Li, Silvio Savarese, Hyowon Gweon, C. Karen Liu, Jiajun Wu, Li Fei-Fei *CoRL 2022*

Skills

Programming languages

Python, C/C++, Javascript, CSS, HTML

Software & Frameworks

PyTorch, Sklearn, Pandas, Django, React.js

Languages

English (fluent), Mandarin (native)