

Wensi Ai

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Research Interests

Human-Robot Interaction, Embodied AI, Physics-based Simulation.

Education

- 2023 – Present **Stanford University** – Stanford, CA
M.S. in Computer Science. *GPA 4.3*
- 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.
- 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** – Beijing, China
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, Wensi Ai, 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, Wensi Ai, 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, Wensi Ai, 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)