KAIZHI ZHENG

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EDUCATION

Univeristy of California, Santa Cruz (UCSC), Santa Cruz, USA

Sep.2021 – Present

Ph.D. student in Computer Science and Engineering (CSE); Advisor: Prof. Xin (Eric) Wang

University of Michigan, Ann Arbor (UMich), Ann Arbor, USA

Sep.2019 – May.2021

M.S. in Electrical and Computer Engineering (ECE); GPA:3.97; Advisor: Prof. Odest Chadwicke Jenkins

Huazhong University of Science and Technology (HUST), Wuhan, China Sep.2015 – Jun.2019

B.E. in Electrical Engineering and Automation; GPA:3.65

■ PUBLICATIONS & PREPRINTS

- 1. **Zheng, Kaizhi**, Ruijian Zhang, Jing Gu, Jie Yang, and Xin Eric Wang. "Constructing a 3D Town from a Single Image." arXiv preprint arXiv:2505.15765 (2025).
- 2. Fan, Yue, Xuehai He, Diji Yang, **Kaizhi Zheng**, Ching-Chen Kuo, Yuting Zheng, Sravana Jyothi Narayanaraju, Xinze Guan, and Xin Eric Wang. "GRIT: Teaching MLLMs to Think with Images." arXiv preprint arXiv:2505.15879 (2025).
- 3. **Zheng, Kaizhi**, Xiaotong Chen, Xuehai He, Jing Gu, Linjie Li, Zhengyuan Yang, Kevin Lin, Jianfeng Wang, Lijuan Wang, and Xin Eric Wang. "EditRoom: LLM-Parameterized Graph Diffusion for Composable 3D Room Layout Editing". *In The Thirteenth International Conference on Learning Representations*, 2025 (ICLR 2025).
- 4. He, Xuehai, Weixi Feng*, **Kaizhi Zheng***, Yujie Lu*, Wanrong Zhu*, Jiachen Li*, Yue Fan*, Jianfeng Wang, Linjie Li, Zhengyuan Yang, Kevin Lin, William Yang Wang, Lijuan Wang, and Xin Eric Wang. "MMWorld: Towards Multi-discipline Multi-faceted World Model Evaluation in Videos". *In The Thirteenth International Conference on Learning Representations*, 2025 (ICLR 2025).
- 5. Zhou, Yufan, Ruiyi Zhang, **Kaizhi Zheng**, Nanxuan Zhao, Jiuxiang Gu, Zichao Wang, Xin Eric Wang, and Tong Sun. "Toffee: Efficient Million-Scale Dataset Construction for Subject-Driven Text-to-Image Generation". *arXiv preprint* (2023).
- 6. **Zheng, Kaizhi***, Xuehai He*, and Xin Eric Wang. "MiniGPT-5: Interleaved Vision-and-Language Generation via Generative Vokens." *arXiv preprint arXiv:2310.02239 (2023)*
- 7. Fan, Yue, Jing Gu, **Kaizhi Zheng**, and Xin Eric Wang. "R2H: Building Multimodal Navigation Helpers that Respond to Help." *The 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP 2023)*
- 8. Zhou, Kaiwen, **Kaizhi Zheng**, Connor Pryor, Yilin Shen, Hongxia Jin, Lise Getoor, Xin Eric Wang. "ESC: Exploration with Soft Commonsense Constraints for Zero-shot Object Navigation." *Fortieth International Conference on Machine Learning (ICML 2023)*.
- 9. **Zheng, Kaizhi**, Kaiwen Zhou, Jing Gu, Yue Fan, Jialu Wang, Zonglin Li, Xuehai He, and Xin Eric Wang. "JARVIS: A Neuro-Symbolic Commonsense Reasoning Framework for Conversational Embodied Agents." *arXiv preprint arXiv:2208.13266 (2022)*.
- 10. **Zheng, Kaizhi**, Xiaotong Chen, Odest Chadwicke Jenkins, and Xin Eric Wang. "VLMbench: A Compositional Benchmark for Vision-and-Language Manipulation." *In thirty-sixth Conference on Neural Information Processing Systems Datasets and Benchmarks Track (NeurIPS 2022)*.
- 11. Chen, Xiaotong, **Kaizhi Zheng**, Zhen Zeng, Shreshtha Basu, James Cooney, Jana Pavlasek, and Odest Chadwicke Jenkins. "Manipulation-Oriented Object Perception in Clutter through Affordance Coordinate Frames." *In 2022 IEEE-RAS International Conference on Humanoid Robots (Humanoids 2022)*.
- 12. Sheetz, Emily, Xiaotong Chen, Zhen Zeng, **Kaizhi Zheng**, Qiuyu Shi, and Odest Chadwicke Jenkins. "Composable Causality in Semantic Robot Programming." *In 2022 International Conference on Robotics and Automation (ICRA)*, pp. 1380-1386. IEEE, 2022.

EXPERIENCE

UCSC, California, USA

Sep 2021 - Present

Research Assistant Advisor: Prof. Xin Eric Wang

• Focusing on multimodality learning and embodied AI.

Adobe Research, California, USA

Jun 2024 - Sep 2024

Research Intern Advisor: Dr. Yufan Zhou

• Working on Multimodal Large Language Model for image understanding and generation.

Microsoft Research, California, USA

Jan 2024 – May 2024

Research Intern Advisor: Mrs. Linjie Li

• Working on Large Language Model (LLM) for 3D indoor scene editing.

Samsung Research America (SRA), California, USA

Jun 2023 – Sep 2023

Research Intern Advisor: Dr. Yilin Shen

• Working on Large Language Model (LLM) for planning.

UMich, Michigan, USA

Jan 2020 - May 2021

Research Assistant Advisor: Prof. Odest Chadwicke Jenkins

• Working on robot perception. Proposed Affordance Coordinate Frame (ACF).

University of Hong Kong, Hong Kong, China

Jun 2018 - Sep 2018

Research Assistant Intern Advisor: Prof. Yik-Chung Wu

• Working on super-resolution reconstruction and speaker separation problems in Chinese speeches.

ACADEMIC ACTIVITIES

- Conference Reviewer: NeurIPS'22, MM'24, NeurIPS'24, ICLR'25, ICCV'25, NeurIPS'25
- Program Committee Member: ICCV 2023 Workshop: CLVL: 5th Workshop On Closing The Loop Between Vision And Language
- · Reward:
 - First place of Alexa Prize SimBot Public Benchmark Challenge.
 Media: https://news.ucsc.edu/2022/04/2022-alexa-prize.html
 - Thrid place of Alexa Prize SimBot Challenge.
 Media: https://news.ucsc.edu/2023/06/simbot-results.html