Shijie Zhou

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I am a fourth-year Ph.D. candidate in Computer Science at the University at Buffalo. My research interests lie in LLM/MLLMs and their applications such as **multi-turn agentic planning**, **GUI agents**, and **document understanding**. Currently, I am working on **self-evolving language models and reward signals for open-ended/verifiable tasks**.

Education

University at Buffalo — Buffalo, NY, USA
PhD, Computer Science and Engineering — *Aug. 2023 – Present*
Advisor: Dr. Changyou Chen

The Pennsylvania State University — University Park, PA, USA
MS, Informatics — *Aug. 2021 – May 2023*

Soochow University — Suzhou, China
BE, Measurement Control Technology and Instruments — *Sep. 2016 – Jun. 2020*

Experiences

Adobe Research — *Sep 2026 – Now*
Research Intern, working with Jihyung Kil — College Park, MD, USA
RAG-based efficient UI generation agent.

Qwen Large Model Application Team, Alibaba — *May 2026 – Sep. 2026*
Research Intern, working with Pengyu Cheng — Hangzhou, CN
RL post-training for the base chat model; Self-Evolving Language Models for verifiable tasks (Paper: RF-SD).

Adobe Research — *May 2025 – Nov. 2025*
Research Intern, working with Ruiyi Zhang — San Jose, CA, USA
GUI/Document grounding and planning (Papers: GUI-AIMA, Doc-AGround, TraceR1).

Publications

RF-SD: Reference-Free On-policy Self-Distillation via Self-Reflection
Submitted, during the internship in Qwen Large Model Application Team.
Shijie Zhou (1st), etc.

GUI-AXON: Specialized Pathways for Visual Grounding
To be submitted.
Shijie Zhou (1st), etc.

GUI-AIMA: Aligning Intrinsic Multimodal Attention with a Context Anchor for GUI Grounding
ECCV 2026
Shijie Zhou, Viet Dac Lai, Hao Tan, Jihyung Kil, Wanrong Zhu, Changyou Chen, Ruiyi Zhang

TraceR1: Anticipatory Planning for Multimodal AI Agents
CVPR 2026 Findings
Yongyuan Liang, ***Shijie Zhou***, Yu Gu, Hao Tan, Gang Wu, Franck Dernoncourt, Jihyung Kil, Ryan A. Rossi, Ruiyi Zhang

Doc-AGround: Unveiling Inherent Visual Grounding in Multimodal LLMs for Text-Rich Images
ACL 2026 Findings
Shijie Zhou, Jihyung Kil, Ming Li, Jiuxiang Gu, Curtis Wigington, Rajiv Jain, Changyou Chen, Ruiyi Zhang

Multimodal LLMs as Customized Reward Models for Text-to-Image Generation
ICCV 2025
Shijie Zhou, Ruiyi Zhang, Huaisheng Zhu, Branislav Kveton, Yufan Zhou, Jiuxiang Gu, Jian Chen, Changyou Chen

A High-Quality Text-Rich Image Instruction Tuning Dataset via Hybrid Instruction Generation
COLING 2025
Shijie Zhou, Ruiyi Zhang, Yufan Zhou, Changyou Chen

Simple Denoising Diffusion Language Models
ICML 2026
Huaisheng Zhu, Zhengyu Chen, ***Shijie Zhou***, Zhihui Xie, Yige Yuan, Shiqi Chen, Zhimeng Guo, Siyuan Xu, Hangfan Zhang, Vasant Honavar, Teng Xiao

Enhancing Diffusion Posterior Sampling for Inverse Problems by Integrating Crafted Measurements
Preprint (arXiv:2411.09850)
Shijie Zhou, Huaisheng Zhu, Rohan Sharma, Jiayi Chen, Ruiyi Zhang, Kaiyi Ji, Changyou Chen

Simple Distillation for One-Step Diffusion Models
NeurIPS 2025
Huaisheng Zhu, Teng Xiao, ***Shijie Zhou***, Zhimeng Guo, Hangfan Zhang, Siyuan Xu, Vasant G Honavar

Skill Self-Play: Pushing the Frontier of LLM Capability with Co-Evolving Skills
Preprint(arXiv:2607.22529)
Siyuan Huang, Pengyu Cheng, Haotian Liu, Tao Chen, Yihao Liu, Jingwei Ni, ***Shijie Zhou***, Ziyi Yang, Gangwei Jiang, Mengyu Zhou, Yu Cheng, Xiaoxi Jiang, Guanjun Jiang

Reinforcement Learning for Large Language Models via Group Preference Reward Shaping
EMNLP 2025
Huaisheng Zhu, Siyuan Xu, Hangfan Zhang, Teng Xiao, Zhimeng Guo, ***Shijie Zhou***, Shuyue Hu, Vasant G Honavar

Discriminative Adversarial Unlearning
Preprint (arXiv:2402.06864)
Rohan Sharma, ***Shijie Zhou***, Kaiyi Ji, Changyou Chen

VisR-Bench: A Visual Retrieval Benchmark for Visually-Rich Documents
ICLR 2025 Workshop on Foundation Models in the Wild
Jian Chen, Ruiyi Zhang, Ming Li, ***Shijie Zhou***, Changyou Chen

KidSpeak: A General Multi-purpose LLM for Kids' Speech Recognition and Screening
Preprint (arXiv:2512.05994)
Rohan Sharma, Dancheng Liu, Jingchen Sun, ***Shijie Zhou***, Jiayu Qin, Jinjun Xiong, Changyou Chen

Link Prediction on Heterophilic Graphs via Disentangled Representation Learning
Preprint (arXiv:2208.01820)
Shijie Zhou, Zhimeng Guo, Charu Aggarwal, Xiang Zhang, and Suhang Wang

Label-Wise Graph Convolutional Network for Heterophilic Graphs
LoG 2022
Enyan Dai, ***Shijie Zhou***, Zhimeng Guo, and Suhang Wang

Services

Reviewer	TMLR, ICLR 2026, CVPR 2026, ACL Rolling Review (ARR), ICML 2026, ECCV 2026, NeurIPS 2026
Teaching Assistant	DS 420; CSE 574/474; CSE 676

Awards

Gold Reviewer, *ICML*	2026
Guosheng Scholarship, *Soochow University*	2020
Honorable Mention, *MCM/ICM*	2019