SHAOYANG ZHANG

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EDUCATION

University of Michigan, Ann Arbor Aug 2025 - May 2027
B.S.E. in Computer Science *(expected)*

Shanghai Jiao Tong University Aug 2023 - Aug 2027
B.E. in Mechanical Engineering *(expected)* · GPA: 3.74/4.00
President, ASME UMJI Student Chapter; Vice President, Students Science & Technology Innovation Association

RESEARCH EXPERIENCE

Northwestern University Mar 2026 - Present
Undergraduate Research Assistant · Remote

- Lead an ongoing project on world-model hijacking and targeted adversarial attacks; design and run experiments across open-source world models and multimodal architectures.
- Investigated attention sinks and activation outliers through controlled interventions and layer-wise representation analysis; co-authored OASIS (NeurIPS 2026; COLM workshop Spotlight).

Michigan Institute for Data and AI in Society (MIDAS) Oct 2025 - Sep 2026
Undergraduate Research Assistant · University of Michigan

- Built conversation-analysis and knowledge-state-aware user-simulation pipelines with Prof. Q. Vera Liao and Dr. Yoonjoo Lee, including knowledge updates, query generation, and evaluation.
- Implemented the initial end-to-end human validation-study system and refined it through pilot feedback; co-authored KnowSim (EMNLP 2026).

Data-informed Design and Intelligent Systems Laboratory Oct 2024 - Oct 2025
Undergraduate Research Assistant · Shanghai Jiao Tong University

- Reproduced and evaluated MimicPlay for long-horizon robotic imitation learning under Prof. Youyi Bi and Dr. Chang Liu; independently built keyboard teleoperation to collect robot demonstrations.

PUBLICATIONS

Haozheng Luo*, Haoran Dai*, **Shaoyang Zhang**, Xi Chen, Eric Hanchen Jiang, Yijiang Li, Jingyuan Huang, Chenghao Qiu, Chenwei Xu, Zhenyu Pan, Haotian Zhang, Binghui Wang, and Yan Chen.
Attention Sinks and Outliers in Attention Residuals.
NeurIPS 2026, Poster; **COLM 2026 Workshop on Efficient Reasoning**, Spotlight.
arXiv · OpenReview

Yoonjoo Lee, Hyoungwook Jin, Tae Soo Kim, **Shaoyang Zhang**, Philippe Laban, and Q. Vera Liao.
KnowSim: Evaluating Information Calibration in LLM Assistants with User Simulators that Learn.
EMNLP 2026, Main Conference.
Paper

Xiaoyun Tian, Bin Liu, Jianzhong Yang, Bo Ai, Huailiang Zhao, and **Shaoyang Zhang**.
Knowledge Graph Enhanced Interactive Fault Diagnosis O&M Approach Based on Large Models of Electrical Power.
PSGEC 2024.
IEEE Xplore

HONORS & AWARDS

Cheng Family Scholarship, University of Michigan 2025
Dean’s List, University of Michigan 2025 - Present
Academic Excellence Scholarship, Shanghai Jiao Tong University 2024