JING DING

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EDUCATION

University of Michigan — Ann Arbor, USA
Bachelor of Science in Data Science and Mathematics — Jan 2025 – Dec 2026 (expected)
GPA: 3.93/4.00

Huazhong University of Science and Technology (HUST) — Wuhan, China
Bachelor of Science in Electronic Information Engineering — Sep 2022 – Jun 2024
GPA: 4.49/5.00 — Avg: 90.3/100 — Rank: 4/24

RESEARCH EXPERIENCE

Vector Institute — Toronto, ON, Canada
Summer Research Intern, VLA grounding, Supervisor: Prof. Freda Shi — Jun 2026 – Sep 2026

- Studying verb-level action grounding in vision-language-action models, with a focus on diagnosing shortcut behaviors that bypass compositional semantics.

University of Michigan, SLED Lab — Ann Arbor, MI, USA
Undergraduate Research Assistant, Advisors: Ziqiao Ma, Prof. Joyce Chai — Feb 2025 – Present

- Led an independent thesis on abstract concept grounding in vision transformers, identifying metonymic circuits where VLMs route abstract concepts through concrete object anchors rather than compositional representations. [EMNLP 2026 Main Conference; sole first author]
- Co-first-authored a study on pragmatic competence in referring expression generation, analyzing internal failure modes of VLMs. [COLM 2025]
- Co-authored a multimodal benchmark for long-horizon behavioral pattern inference in human-agent interaction; contributed audio generation, data filtering, and human study. [under review]
- Co-authored a study on autoregressive world-language modeling for grounded word learning; contributed data generation and experimental analysis. [under review]
- Conducted experiments for NeurIPS 2025 tutorial: The Science of Benchmarking, including evaluation pipeline, local model inference, data synthesis, and analysis.

Huazhong University of Science and Technology, Software College — Wuhan, China
LLM Applications in the Insurance Domain (InsBenchQA) — Sep 2023 – Jun 2024

- Constructed InsBenchQA, a benchmark dataset for question answering in the Chinese insurance domain.
- Led a team of four researchers; coordinated research direction, task allocation, and experimental execution.

PUBLICATIONS

(* means equal contribution)

Jing Ding, Ziqiao Ma, Jiayuan Mao, Joyce Chai, Freda Shi. "Metonymic Circuits for Abstract Concept Grounding in Vision Transformers". In: *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2026.

Ziqiao Ma*, **Jing Ding***, Xuejun Zhang, Dezhi Luo, Jiahe Ding, Sihan Xu, Yuchen Huang, Run Peng, and Joyce Chai. "Vision-Language Models Are Not Pragmatically Competent in Referring Expression Generation". In: *Proceedings of the Conference on Language Modeling (COLM).* **Spotlight of the 4th Workshop on Computer Vision in the Wild (CVinW) @ CVPR 2025.** 2025.

Run Peng, Zinnia Nie, **Jing Ding**, Yinpei Dai, Yichi Zhang, Zengqing Wu, Yao Fu, Ziqiao Ma, Jiayuan Mao, Joyce Chai. "SIMLIFE: Pattern Understanding for Long-Horizon Human-Agent Partnership". Under review.

Ziqiao Ma, **Jing Ding**, Sihan Xu, Stella X. Yu, Jiayuan Mao, Freda Shi, Joshua B Tenenbaum, Joyce Chai. "Learning Words by Simulating Worlds: Towards Autoregressive World-Language Modeling". Under review.

SKILLS

Programming	Python, PyTorch (proficient); Shell scripting (proficient); C, C++, Java (familiar)
Technical	Natural language processing, computer vision, machine learning, deep learning, reinforcement learning, mechanistic interpretability, model evaluation, data analysis, SLURM
Languages	Chinese (native), English (fluent)