

EDUCATION

Purdue University

IN, USA

Ph.D. in Computer Science

Aug. 2025 – 2030 (Expected)

o Advisor: Dr. Ruqi Zhang

Tianjin University

Tianjin, China

B.S. in Data Science and Big Data Technology, School of Mathematics

Aug. 2021 - Jun. 2025

o Advisor: Prof. Bing Cao & Prof. Qinghua Hu

Research Interest

My primary research goal is to develop reliable and efficient machine learning models/algorithms to address real-world challenges. With this vision, my work focuses on steering Foundation Models (FMs), including LLMs, VLMs, and diffusion models toward human preference and improved reasoning. Currently, my research interests include:

LLM Post-Training

* LLM/VLMs Alignment, RLHF, Reasoning, Self-Improving LLM/VLMs

Trustworthy AI

* AI Safety, Fairness, Uncertainty, etc.

Multimodal Learning

* Multimodal Fusion, Imbalanced Multimodal Learning

Publications

(* denotes equal contribution)

[P1] SafeWork-R1: Coevolving Safety and Intelligence under the AI-45 $^{\circ}$ Law

Shanghai AI Lab, · · · , Yi Ding, [100+ Authors] *Technical Report* 🖟

[P2] Rethinking Bottlenecks in Safety Fine-Tuning of Vision Language Models

Yi Ding*, Lijun Li*, Bing Cao, Jing Shao Under Review (Preprint) ☑ ❖

[C1] Sherlock: Self-Correcting Reasoning in Vision-Language Models

Yi Ding, Ruqi Zhang

Neural Information Processing Systems (NeurIPS 2025) 🖹 🔾

$[C2] \ \ Visual \ Contextual \ Attack: \ Jailbreaking \ MLLMs \ with \ Image-Driven \ Context \ Injection$

Ziqi Miao*, Yi Ding*, Lijun Li, Jing Shao

Empirical Methods in Natural Language Processing Main Conference (EMNLP 2025)

[C3] ETA: Evaluating Then Aligning Safety of Vision Language Models at Inference Time

Yi Ding, Bolian li, Ruqi Zhang

International Conference on Learning Representations (ICLR 2025)

[C4] Test-Time Dynamic Image Fusion

Bing Cao (Advisor), Yinan Xia*, Yi Ding*, Changqing Zhang, Qinghua Hu Neural Information Processing Systems (NeurIPS 2024)

[C5] Predictive Dynamic Fusion

Bing Cao (Advisor), Yinan Xia*, Yi Ding*, Changqing Zhang, Qinghua Hu International Conference on Machine Learning (ICML 2024)

RESEARCH EXPERIENCE

RZ-Lab, Purdue University

Research Intern, Advised by Dr. Ruqi Zhang Open Trust Lab, Shanghai AI Laboratory

Research Intern, Advised by Dr. Lijun Li

IN, USA May 2024–May 2025

Beijing, China

Dec. 2024-Mar. 2025

Tianjin, China Sep. 2023-Dec. 2024

MLDM Lab, Tianjin University

Research Intern, Advised by Prof. Bing Cao and Prof. Qinghua Hu

Skill

Languages: Chinese Mandarin (Native), English (TOEFL 102(22))

Research Abilities: Proficient in coding: Python, LATEX, MATLAB; Enjoys mathematical derivations; Solid foundation in mathematics and statistics.

SERVICE

Conference Reviewer

NeurIPS 2025, ICLR 2025, ARR 2025 May