Chongyu Fan

Ph.D. Student in Computer Science

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Personal Information

I am a second-year Ph.D. student in computer science at Michigan State University advised by Dr. Sijia Liu. My research focuses on trustworthy and efficient algorthms, including machine unlearning and efficient reasoning.

Education Experience

Doctor of Computer Science   *2024.08 - Present*
Michigan State University, East Lansing, USA
Advisor: Dr. Sijia Liu
OPTML Lab

Bachelor of Engineering   *2020.09 - 2024.06*
Huazhong University of Science and Technology, Wuhan, China
Outstanding Graduate
GPA: 3.96/4.0

Work Experience

Research Scientist Intern   *2025.05 - 2025.08*
ByteDance, San Jose, USA
Advisor: Dr. Jian Du

Publications

Preprint Paper

[**P1**] **C. Fan***, J. Liu*, L. Lin*, J. Jia, R. Zhang, S. Mei, S. Liu. *Simplicity Prevails: Rethinking Negative Preference Optimization for LLM Unlearning.*, [PDF], [Code].

[**P2**] **C. Fan**, Y. Zhang, J. Jia, A. Hero, S. Liu. *CyclicReflex: Improving Large Reasoning Models via Cyclical Reflection Token Scheduling.*, [PDF], [Code].

[**P3**] J. Jia, H. Reisizadeh, **C. Fan**, N. Baracaldo, M. Hong, S. Liu. *EPiC: Towards Lossless Speedup for Reasoning Training through Edge-Preserving CoT Condensation.*, [PDF], [Code].

Conference Paper

[**C1**] **C. Fan***, J. Liu*, Y. Zhang, D. Wei, E. Wong, S. Liu. *Salun: Empowering machine unlearning via gradient-based weight saliency in both image classification and generation.* 12th International Conference on Learning Representations (ICLR'24 - Spotlight), [PDF], [Code], [Website].

[**C2**] **C. Fan***, J. Liu*, A. Hero, S. Liu. *Challenging forgets: Unveiling the worst-case forget sets in machine unlearning.* 18th European Conference on Computer Vision (ECCV'24), [PDF], [Code].

[**C3**] Y. Zhang, **C. Fan**, Y. Zhang, Y. Yao, J. Jia, J. Liu, G. Zhang, G. Liu, R. Kompelia, X. Liu, S. Liu. *UnlearnCanvas: Stylized Image Dataset for Enhanced Machine Unlearning Evaluation in Diffusion Models.* 30th Annual Conference on Neural Information Processing Systems (Neurips'24), [PDF], [Code], [Website].

[**C4**] Y. Zhang, X. Chen, J. Jia, Y. Zhang, **C. Fan**, J. Liu, M. Hong, K. Ding, S. Liu.. *Defensive Unlearning with Adversarial Training for Robust Concept Erasure in Diffusion Models.* 30th Annual Conference on Neural Information Processing Systems (Neurips'24), [PDF], [Code].

[C5] <u>**C. Fan***</u>, J. Jia*, Y. Zhang, A. Ramakrishna, M. Hong, S. Liu. *Towards LLM Unlearning Resilient to Relearning Attacks: A Sharpness-Aware Minimization Perspective and Beyond.*, 42th International Conference on Machine Learning (ICML'25), [PDF], [Code].

Professional Activities

- **Reviewer:** NeurIPS, ICLR, ICML, AISTATS