

EDUCATION

School of Computer Science, Shanghai Jiao Tong University

Shanghai, China

Ph.D. in Computer Science and Engineering

2022 - 2027 (*expected*)

- Advisor: Prof. Junchi Yan
- Research area: Theory of Deep Learning, Science of Large Language Models

UM-SJTU Joint Institute, Shanghai Jiao Tong University

Shanghai, China

B.E. in Electrical and Computer Engineering

2018 - 2022

- GPA (before post-grad recommendation): 3.74/4.00, Rank: 9/158.

PUBLICATIONS

(* indicates equal contributions; † indicates correspondence.)

1. Zhanpeng Zhou, Wei Huang, Mingyuan Bai, Krikamol Muandet, Kun Zhang, Taiji Suzuki. **Emergent Trust Risks in Large Reasoning Models**. In Submission (Workshop Proposal).
2. Zhanpeng Zhou†, Yongyi Yang, Mahito Sugiyama, Junchi Yan. **New Evidence of the Two-Phase Learning Dynamics of Neural Networks**. In Submission.
3. Tongtian Zhu, Tianyu Zhang, Mingze Wang, Zhanpeng Zhou†, Can Wang. **A Single Global Merging Suffices: Recovering Centralized Learning Performance in Decentralized Learning**. In Submission.
4. Tongcheng Zhang*, Zhanpeng Zhou*†, Mingze Wang, Andi Han, Wei Huang, Taiji Suzuki, Junchi Yan. **On the Learning Dynamics of Two-Layer Networks with Label Noise SGD**. In Submission.
5. Huaijin Wu*, Zhanpeng Zhou*, Xinyu Ye, Junchi Yan. **AI4AI: LLMs 360-Degree Model Adaption beyond Parameters for Synergizing Memory and Reasoning**. In Submission (Position Paper).
6. Qibing Ren, Xinhao Song, Ke Fan, Lijun Li, Zhanpeng Zhou, Gongshen Liu, Junchi Yan, Lizhuang Ma, Jing Shao. **Unintended Harmful Knowledge Elicitation Issue in Large Reasoning Models and a RL Solution**. In Submission.
7. Qiu et al. (Co-author). **On Path to Multimodal Historical Reasoning: HistBench and HistAgent**. In Submission.
8. Jinbo Wang*, Mingze Wang*, Zhanpeng Zhou*, Junchi Yan, Weinan E, Lei Wu. **The Sharpness Disparity Principle in Transformers for Accelerating Language Model Pre-Training**. ICML 2025.
9. Andi Han*, Wei Huang*, Zhanpeng Zhou*†, Gang Niu, Wuyang Chen, Junchi Yan, Akiko Takeda, Taiji Suzuki. **On the Role of Label Noise in the Feature Learning Process**. ICML 2025.
10. Zijun Chen*, Zhanpeng Zhou*†, Bo Zhang, Weinan Zhang, Xi Sun, Junchi Yan. **SE-Merging: A Self-Enhanced Approach for Dynamic Model Merging**. IJCNN 2025.
11. Zhanpeng Zhou†, Yongyi Yang, Jie Ren, Mahito Sugiyama, Junchi Yan. **On the Cone Effect in the Learning Dynamics**. ICLR 2025 Workshop.
12. Zhanpeng Zhou*†, Mingze Wang*, Yuchen Mao, Bingrui Li, Junchi Yan. **Sharpness-Aware Minimization Efficiently Selects Flatter Minima Late in Training**. ICLR 2025 (Spotlight).
13. Bingrui Li, Wei Huang, Andi Han, Zhanpeng Zhou, Taiji Suzuki, Jun Zhu, Jianfei Chen. **On the Optimization and Generalization of Two-layer Transformers with Sign Gradient Descent**. ICLR 2025 (Spotlight).
14. Zhanpeng Zhou*, Zijun Chen*, Yilan Chen, Bo Zhang, Junchi Yan. **On the Emergence of Cross-Task Linearity in the Pretraining-Finetuning Paradigm**. ICML 2024.

PUBLICATIONS (CONTINUE)	15. Yiting Chen, Zhanpeng Zhou, Junchi Yan. Going Beyond Neural Network Feature Similarity: The Network Feature Complexity and Its Interpretation Using Category Theory. ICLR 2024.	
	16. Zhanpeng Zhou, Yongyi Yang, Xiaojiang Yang, Junchi Yan, Wei Hu. Going Beyond Linear Mode Connectivity: The Layerwise Linear Feature Connectivity. NeurIPS 2023.	
	17. Zhanpeng Zhou*, Wen Shen*, Huixin Chen*, Ling Tang, Quanshi Zhang. Batch Normalization Is Blind to the First and Second Derivatives of the Loss. AAAI 2024 (Oral).	
	18. Ling Tang*, Wen Shen*, Zhanpeng Zhou, Quanshi Zhang. Defects of Convolutional Decoder Networks in Frequency Representation. ICML 2023.	
	19. Jie Ren, Zhanpeng Zhou, Qirui Chen, Quanshi Zhang. Can We Faithfully Represent Absence States to Compute Shapley Values on a DNN? ICLR 2023.	
	20. Jie Ren*, Die Zhang*, Yisen Wang*, Lu Chen, Zhanpeng Zhou, Yiting Chen, Xu Cheng, Xin Wang, Meng Zhou, Jie Shi, Quanshi Zhang. A Unified Game-Theoretic Interpretation of Adversarial Robustness. NeurIPS 2021.	
INTERNSHIPS	MiniMax AI. Shanghai, China	2025/04 - 2025/07 (expected)
	• Student Researcher, focusing on LLM pretraining.	
	RIKEN AIP. Tokyo, Japan	2025/04 - 2025/10 (expected)
	• Student Trainee, advised by Prof. Taiji Suzuki.	
	National Institute of Informatics. Tokyo, Japan	2023/09 - 2024/03
	• Research Intern, advised by Prof. Mahito Sugiyama.	
	Mila Quebec. Montreal, Canada	2021/03 - 2021/06
	• Research Intern, advised by Prof. Jian Tang.	
AWARDS AND HONORS	• National Scholarship (top 0.2%), Ministry of Education	
	2024/11	
	• Top Internship Evaluation, National Institute of Informatics	
	2024/03	
	• Outstanding Graduate Student, Shanghai Jiao Tong University,	
	2022/05	
	• Yu Liming Scholarship, Shanghai Jiao Tong University	
	2021/11	
	• John Wu & Jane Sun Scholarship, Shanghai Jiao Tong University	
	2020/11	
	• Best Technology Award in Summer Expo, Shanghai Jiao Tong University	
	2019/08	
ACADEMIC SERVICES	Conference Reviewer: ICML ('22-25), NeurIPS ('22-25), ICLR ('24-25), AISTATS '25	
	Journal Reviewer: T-PAMI, Intelligent Computing (Science Partner)	