

YIPING WANG

✉ ypwang61@cs.washington.edu / ✉ yipingwang6161@gmail.com

🌐 <https://ypwang61.github.io/>

October 14, 2023

🎓 EDUCATION

University of Washington, Seattle

Sept. 2023 - Present

Ph.D. student in Paul G. Allen School of Computer Science & Engineering

Adviser: Prof. [Simon Shaolei Du](#)

Zhejiang University

Sept. 2019 - June 2023

B.Eng. in Computer Science & Technology at College of Computer Science and Technology

- **Performance:** Grade: **3.97/4.0 (91.7/100)**; Rank: **Top 1%**
- **Honors Program:** Mixed Class in Chu Kochen Honors College (Top 5% students in Zhejiang University)
- **Minor Program:** Mathematics and Applied Mathematics , Earned Credits: 45.5
- **Highest level scholarship in ZJU:** Chu Kochen Scholarship (**Top 12 in 20000+ undergraduates**)

📖 RESEARCH INTEREST

My main research interest lies in **machine learning theory**, especially **the foundations of deep learning and representation learning**. I am also keen on developing practical machine learning algorithms with strong theoretical guarantees, and currently I'm working on optimizing data selection methods for training foundational models. Furthermore, I always hold a strong enthusiasm for understanding the essence of intelligence and exploring the cross-cutting areas of mathematics, physics, and AI.

📄 PUBLICATIONS

* denotes equal contribution or alphabetical ordering.

1. Yuandong Tian, **Yiping Wang**, Beidi Chen, Simon Du
Scan and Snap: Understanding Training Dynamics and Token Composition in 1-layer Transformer [[Arxiv](#)]
Conference on Neural Information Processing Systems (NeurIPS) 2023.
*Selected as **Oral** presentation at High-dimensional learning dynamics workshop at ICML 2023*
2. **Yiping Wang**, Yifang Chen, Kevin Jamieson, Simon Du
Improved Active Multi-Task Representation Learning via Lasso [[Arxiv](#)]
International Conference on Machine Learning (ICML) 2023.
3. Huaxiu Yao*, **Yiping Wang***, Linjun Zhang, James Zou, Chelsea Finn
C-Mixup: Improving Generalization in Regression [[Arxiv](#)] [[Code](#)]
Conference on Neural Information Processing Systems (NeurIPS) 2022.

📄 PREPRINT

* denotes equal contribution or alphabetical ordering.

1. Yuandong Tian, **Yiping Wang**, Zhenyu Zhang, Beidi Chen, Simon Du
JoMA: Demystifying Multilayer Transformers via JOint Dynamics of MLP and Attention [[Arxiv](#)]

🏆 HONORS AND AWARDS

Chu Kochen Scholarship in Zhejiang University (Top 12 in 20000+ undergraduates)	2022
National Scholarship in Chu Kochen Honor College (Top 2% in 600+ students)	2020
Provincial Government Scholarship in Chu Kochen Honor College (Top 5% in 600+ students)	2021
Excellence Scholarship in Chu Kochen Honor College (Top 1% in 600+ students)	2021
Pilot Scholarship for Academic Excellence in Chu Kochen Honor College (Top 10% in 600+ students)	2020

<i>1st Prize</i> for Academic Excellence in Chu Kochen Honor College	2020&2021&2022
<i>1st Prize</i> in Zhejiang Division of National Mathematics Competition for College Students	2020
<i>Five-Star Volunteer</i> in Chu Kochen Honor College (Volunteer hours over 250 h)	2021

⚙ MISCELLANEA

- Programming Languages: C, C++, Python, LaTeX, MATLAB, Verilog HDL
- **TOEFL iBT**: Total 109/120, Reading 29/30, Listening 27/30, Speaking 25/30, Writing 28/30.
- Hobbies: Working out, playing ping-pong, anime.
- Service: Reviewer of NeurIPS 2023, ICLR 2024