

# Yang Chen

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## EDUCATION

### **Peking University**

2021-Present

*Ph.D. in Computer Science*

*Ph.D. Student*

*Courses: Pattern Recognition, Computer Vision, Image Understanding, Graph Neural Networks, Deep Reinforcement Learning, Machine Learning, Probability and Statistics in Artificial Intelligence*

*Awards:*

- *Peking University President's Scholarship for Ph.D. Students, 2021*
- *Peking University President's Scholarship for Ph.D. Students, 2022*

### **Peking University**

2017-2021

*B.S. in Computer Science (Summa Cum Laude)*

*Turing Class*

*Courses: Mathematical Analysis, Advanced Algebra, Probability and Statistics, Program Design and Analysis, Data Structure and Algorithm, Algorithm Design and Analysis, Introduction to Theoretical Computer Science, Convex Analysis and Optimization, Randomness and Computation, Algorithmic Game Theory*

## PUBLICATIONS

### **Relational Learning in Pre-Trained Models: A Theory from Hypergraph Recovery Perspective**

*ICML 2024*

*Yang Chen, Cong Fang, Zhouchen Lin, Bing Liu*

- *This paper proposes a mathematical framework to study relational learning in pre-trained models from a perspective of hypergraph recovery.*

### **Task-Robust Pre-Training for Worst-Case Downstream Adaptation**

*NeurIPS 2023*

*Jianghui Wang\*, Yang Chen\*, Xingyu Xie, Cong Fang, Zhouchen Lin*

- *This paper considers pre-training a model that guarantees a uniformly good performance over the downstream tasks via minimax optimization.*

## **Transformer-Based Large Language Models Are Not General Learners:**

### **A Universal Circuit Perspective**

*NeurIPS 2023 ICBINB Workshop*

**Yang Chen**, Yitao Liang, Zhouchen Lin

- *This paper shows Transformer-based large language models are not general learners from a perspective of universal circuits.*

## **SERVICES**

**Reviewer:** *ICML 2024, NeurIPS 2024, ICLR 2025, AISTATS 2025*

## **SKILLS**

**Languages:** *Chinese, English*

**Computer Skills:** *Programming (C, C++, Python), LaTeX Typesetting*