Wenhao Chen

cwher@outlook.com · CWHer https://cwher.github.io

Education

Shanghai Jiao Tong University, Shanghai, China Sept. 2019 – June 2023

B.Eng. in Computer Science and Engineering

- **GPA**: 92.2/100 (or 3.97/4.3), **Rank**: 11/119
- Member of **Zhiyuan Honors Program (Engineering)**
- **Selected A+ courses**: Data Structure (Honor), Discrete Mathematics (Honor), Distributed and Parallel Computing, Probability and Statistics (Honor), Algorithms and Complexity, Operating System, Computer Architecture, Artificial Intelligence, Computer Graphics, ...
- **TA Experience**: Programming and Data Structure I (Honor)

Research Interest

I'm broadly interested in the intersection of machine learning, systems, and computer architecture, which includes

- Computation efficient ML training and inference
- Accelerating ML jobs on heterogeneous hardware

Experience

SDE Intern June 2023 – Present

Machine Learning System Engineer at **HPC-AI Technology**
Content: Maintain and develop new features of **Colossal-AI**.

Research Intern July 2022 – June 2023

Microsoft Research Asia ,**System Research Group**, advised by **Dr. Qi Chen**, **Dr. Quanlu Zhang** and **Dr. Hui Xue**
Research Topics: Efficient Reinforcement Learning Framework, paper in progress.

- Improve resource utilization during the Reinforcement Learning training
- Accelerate Reinforcement Learning computation on heterogeneous and large-scale systems
- Automatically schedule resources for different Reinforcement Learning algorithms on different hardware configurations

Research Intern June 2021 – July 2022

Shanghai Jiao Tong University, **Apex Lab**, supervised by **Prof. Weinan Zhang**
Research Topics: Reinforcement Learning Applications

- Branch Ranking for Efficient Mixed-Integer Programming via Offline Ranking-based Policy Learning (submitted to **ECML PKDD'22**) / arXiv July 2021 – Nov. 2021

  We combined offline Reinforcement Learning and a long-sighted hybrid search scheme to solve Mixed-integer Programming problems efficiently and with better generalization ability.

Honors and Awards

- **Zhiyuan Honor Scholarship** (top 5%), Shanghai Jiao Tong University 2020, 2021, 2022
- **Academic Excellence Scholarship** (top 30%), Shanghai Jiao Tong University 2020, 2021, 2022
- **National Olympiad in Informatics in Provinces (NOIP)**, *1st Prize (477/600)*, China 2018

Programming Skills

- **Programming Languages**: Python, C/C++, CUDA, C#
- **ML Related Skills**: PyTorch (proficient), TensorFlow (able to read)
- **Writing Tools**: Markdown, LaTeX
- **Tools and Environments**: Git, Linux, Docker

Language Skill

- **TOEFL**: 105/120 (Reading 30, Listening 28, Speaking 23, Writing 24)