Chiyuan Wang

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Summary

I am Chiyuan Wang, a Ph.D. student at the School of Computer Science, Peking University. My research focuses on multi-agent reinforcement learning (MARL) and computational economics (CE). I am dedicated to interdisciplinary research at the intersection of economics and computer science, utilizing high-performance hardware and advanced coding frameworks. My advisor is Professor Xiaotie Deng, and I am also co-advised by Professors Bo Li and Yaodong Yang.

Projects

AI for Macroeconomic
This project is part of the National Natural Science Foundation of China's (NSFC) Original Exploration Program, led by Professor Bo Li from the School of Economics at Peking University, and is supported by the National Natural Science Foundation of China. I was responsible for research related to solving theoretical macroeconomic models.

Macroeconomic Module of Social Simulator
At the Beijing Institute for General Artificial Intelligence and the Social Simulator project in Wuhan East Lake High-Tech Development Zone, I worked under the guidance of Professor Bo Li and was jointly responsible for the macroeconomic simulation sub-task. My primary contributions included developing models, writing solution code, and building a visualization platform for this research.

Zhixing AI Wheelchair Link to News Report

The Zhixing Future AI Wheelchair Project, led by Professor Dihua Li, Dean of the College of Architecture and Landscape of Peking University, is a public welfare initiative focused on intelligent assistive technology for people with disabilities. It developed a voice-feedback obstacle avoidance add-on device for a high school student with multiple disabilities, including visual impairment and physical disability. I handled all development stages.

Education

2025 - present	PhD Student at School of Computer Science, **Peking University**	
2021 - 2025	Bachelor's Degree at Yuanpei College, **Peking University**	(GPA: 3.4/4.0)
2018 - 2021	Senior Student at **The Secondary High School of BNU**	

Working Papers

2023.5-present
Sample-Efficient Regret-Minimizing Double Oracle in Two-Player Zero-Sum Extensive-Form Games
2025.3-present
OmniEcon: A Universal and Sample-Efficient Multi-agent Macroeconomic Framework
2025.7-present
A Reinforcement Learning Approach to Heterogeneous Agent Macroeconomics

Skills

Prog. Language	Python, C/C++, R, SQL
Code Base	Tensorflow, PyTorch, JAX, SciPy