

YIHANG WU

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🎓 EDUCATION

Master of Computer Science and Technology, Zhejiang University Sep. 2024 – present

- GPA: 4.0/4.0 (no rank is provided for graduate studies)
- Awards: First Prize Academic Scholarship (2025)

Bachelor of Computer Science and Technology, Zhejiang University Sep. 2020 – Jul. 2024

- Honors degree of Chu Kochen Honors College. Rank: 3rd/86, GPA: 3.99/4.0
- Awards: Outstanding graduates from Zhejiang Province (2024), Outstanding graduates from Zhejiang University (2024), First Prize Scholarship (2021, 2023), Zhejiang Province Scholarship (2022)

⚙️ RESEARCH INTERESTS

The interdisciplinary area between theoretical computer science, economics and machine learning.

▮ PUBLICATIONS & PREPRINTS

- **Do AI Overviews Benefit Search Engines? An Ecosystem Perspective.** Yihang Wu, Jiajun Tang, Jinfei Liu, Haifeng Xu, Fan Yao. **(Under review)**
- **Reliable and Private Utility Signaling for Data Markets.** Li Peng, Jiayao Zhang, Yihang Wu, Weiran Liu, Jinfei Liu, Zheng Yan, Kui Ren, Lei Zhang, Lin Qu. **(SIGMOD 2026)**
- **Bargaining-Based Data Markets.** Yuran Bi, Jinfei Liu, Kui Ren, Yihang Wu, Yang Cao. **(ICDE 2025)**
- **When Data Pricing Meets Non-Cooperative Game Theory.** Yuran Bi, Yihang Wu, Jinfei Liu, Kui Ren, Li Xiong. **(ICDE 2024)**

▮ RESEARCH EXPERIENCE

Do AI Overviews Benefit Search Engines? An Ecosystem Perspective Oct. 2024 – Jan. 2026

- Propose a game-theoretic model of creator competition under keyword search with AI Overviews, characterize the mixed Nash equilibrium, and design near-optimal profit-maximizing mechanisms to incentivize creators to produce high-quality content, thus improving search engine profit. Conduct a real-world user click experiment to quantify how AI Overviews affect creator incentives, then analyze the profit impact of AI Overviews based on the click data.
- Advisors: Prof. Jinfei Liu (Zhejiang University), Prof. Haifeng Xu (University of Chicago), Prof. Fan Yao (UNC-Chapel Hill). The work is under review.

Reliable and Private Utility Signaling for Data Markets Apr. 2025 – Aug. 2025

- Propose a utility signaling mechanism to help data buyers better estimate the utility of data products before purchase, while ensuring the reliability and privacy of the signaling process, theoretically analyze the effect on seller profit and buyer utility of the proposed signaling mechanism.
- Advisor: Prof. Jinfei Liu (Zhejiang University). The work is accepted to **SIGMOD 2026**.

Bargaining-Based Data Markets Oct. 2023 – Nov. 2024

- Propose a bargaining-based data market framework to resolve the externality in data markets. Prove the convergence of the bargaining process and profit-maximizing properties of the framework.
- Advisor: Prof. Jinfei Liu (Zhejiang University). The work is accepted to **ICDE 2025**.

When Data Pricing Meets Non-Cooperative Game Theory Nov. 2023 – Feb. 2024

- Present a blueprint for applying game theory to data pricing, highlight the characteristics of data, identify four key dimensions (Participant, Object, Action, and Information) to understand the game theory based data pricing.
- Advisor: Prof. Jinfei Liu (Zhejiang University). The work is accepted to **ICDE 2024**.

▮ TEACHING EXPERIENCE

ZJU MATH1261GH/MATH1262GH: Linear Algebra I / II (Honors) 2021, 2022, 2023, 2024

- Course producer of peer assisted learning course in Zhejiang University.
- **Self compiled textbook:** *Linear Algebra Left Undone*, open-sourced on [this GitHub repository](#) (670+ stars).

ZJU CS3099M: Principles of Programming Languages Fall & Winter 2023

- Teaching assistant. A course on the basis of programming languages, including the syntax, type systems, etc.

ZJU CS2045M: Advanced Data Structures and Algorithm Analysis Spring & Summer 2024

- Teaching assistant. A course on advanced data structures and algorithm analysis.

ZJU CS2270M: Data Element Trading Summer 2024, Summer 2025

- Course producer and teaching assistant. A course on data element trading, including data security, basic microeconomics and game theory, data pricing, data valuation, etc.
- **Self compiled textbook:** *Data Element Trading*, to be published in 2026.