YICHI ZHANG

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CoRE 417, Computer Science Department, Rutgers University

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RESEARCH INTERESTS

I'm interested in the intersection between computer science and economics, focusing on information elicitation and aggregation, mechanism design, and human-AI collaborations. Using tools from game theory, statistics, machine learning, and AI, I aim to develop novel models and mechanisms to incentivize honest and effortful information from strategic agents, and to better evaluate and aggregate information from both human and AI agents.

POSITIONS

Rutgers University   Sep 2024 - Present

- Postdoctoral Associate at DIMACS
- Hosts: David Pennock and Lirong Xia

EDUCATION

University of Michigan, Ann Arbor (Umich)   Sep 2019 - Aug 2024

- Ph.D. in School of Information
- Advisor: Grant Schoenebeck
- Thesis: Incentivizing Effort and Honesty for High-quality Information

Shanghai Jiao Tong University (SJTU)   Aug 2015 - Jun 2019

- B.S. in Electronic Science and Engineering
- Advisors: Xinbing Wang and Luoyi Fu

WORKING EXPERIENCES

University of Michigan, School of Information   Sep 2019 - Aug 2024
Graduate Student Research Assistant, Useful Theory Innovation Lab

UCLA, Department of Computer Science   Jul 2018 - Sep 2018
Research Intern (The CSST program), working with Mario Gerla

YITUTech   Feb 2019 - May 2019
Algorithm Engineer Intern

PAPERS IN SUBMISSIONS

Understanding When Peer Grades (Definitely) Outperform Instructor Grades
Noah Burrell, **Yichi Zhang** and Grant Schoenebeck

Conference Design with Strategic Authors
Yichi Zhang, Behzad Nabawi and Grant Schoenebeck

PUBLICATIONS

Eliciting Informative Text Evaluations with Large Language Models
Yuxuan Lu, Shengwei Xu, **Yichi Zhang**, Yuqing Kong and Grant Schoenebeck *In Proceedings of the 25th ACM Conference on Economics and Computation* (EC 2024)
[https://arxiv.org/abs/2405.15077]

Spot Check Equivalence: an Interpretable Metric for Information Elicitation Mechanisms
Shengwei Xu, **Yichi Zhang**, Paul Resnick and Grant Schoenebeck
In Proceedings of the 33nd Annual World Wide Web Conference (WWW 2024)
[https://arxiv.org/abs/2402.13567]
(Oral presentation)

Eliciting Honest Information From Authors Using Sequential Review
Yichi Zhang, Grant Schoenebeck and Weijie Su
In Proceedings of the 38th Annual AAAI Conference on Artificial Intelligence (AAAI 2024)
[https://arxiv.org/abs/2311.14619]

Multi-task Peer Prediction Under Task-Dependent Strategies
Yichi Zhang and Grant Schoenebeck
In Proceedings of the 32nd Annual World Wide Web Conference (WWW 2023)
[https://dl.acm.org/doi/abs/10.1145/3543507.3583292]

High-Effort Crowds: Limited Liability Via Tournaments
Yichi Zhang and Grant Schoenebeck
In Proceedings of the 32nd Annual World Wide Web Conference (WWW 2023)
[https://dl.acm.org/doi/abs/10.1145/3543507.3583334]

A System-Level Analysis of Conference Peer Review
Yichi Zhang, Fang-Yi Yu, Grant Schoenebeck and David Kempe
In Proceedings of the 23rd ACM Conference on Economics and Computation (EC 2022)
[https://arxiv.org/abs/2303.09020]

Information Elicitation From Rowdy Crowds
Grant Schoenebeck, Fang-Yi Yu and **Yichi Zhang** (alphabetically ranked)
In Proceedings of the 30th Annual World Wide Web Conference (WWW 2021)
[https://dl.acm.org/doi/abs/10.1145/3442381.3449840]

POSTERS

Eliciting Effort And Truth-telling From Parties of (No) Interest
- *International Conference on Computational Social Science (2024)*
- *International Conference on Science of Science And Innovation (2024)*
- *ACM Conference on Economics and Computation (2023)*

Multi-task Peer Prediction Under Task-Dependent Strategies
- *ACM Conference on Economics and Computation (2023)*

A System-Level Analysis of Conference Peer Review
- *International Conference on Computational Social Science (2024)*
- *International Conference on Science of Science And Innovation (2024)*
- *ACM Conference on Economics and Computation (2022)*
- *U-M Asian American Faculty & Student Accomplishments Symposium (2022)*

High-Effort Crowds: Limited Liability Via Tournaments

- *ACM Conference on Economics and Computation (2022)*

Information Elicitation From Rowdy Crowds

- *DIMACS Workshop on Forecasting (2021)*
- *ACM Conference on Economics and Computation (2021)*

INVITED TALKS

High-Effort Crowds: Limited Liability Via Tournaments

• Rutgers University, the DIMACS Workshop on Forecasting	October 2024

Eliciting Honest Information From Authors Using Sequential Review

• Princeton University, Mechanism Design Reading Group	October 2024
• University of Massachusetts, Amherst, Computer Science Theory Seminar	October 2024
• Harvard University, EconCS seminar	January 2024

Improving Conference Review Via Mechanism Design

• Renmin University of China, Gaoling School of Artificial Intelligence	August 2023
• Peking University, CFCS seminar	July 2023
• University of Michigan, DSCSS seminar	April 2023
• University of Pennsylvania, Wharton Statistics and Data Science	March 2023
• Drexel University, Computer Science Department	March 2023

TEACHING

Teaching assistant (GSI), Umich   **Winter 2022**
Courses: Big Data Analysis (SI 699)
Instructor: Misha Teplitskiy

Teaching assistant (GSI), Umich   **Fall 2021**
Course: Deep Learning (SIADS 642)
Instructor: Paramveer Dhillon
Course: Network Analysis (SIADS 642)
Instructor: Daniel Romero

AWARDS

• ICSSI Travel Award.	2024
• Rackham Conference Travel Grant, University of Michigan.	2023, 2024
• The Web Conference Student Scholarship.	2021
• Nominee for the Rackham International Student Fellowship, UMSI.	2021
• Outstanding Graduate of Shanghai Jiao Tong University.	2019
• EIC Education Scholarship (top 5%).	2018
• Samsung Scholarship (top 3%).	2017

MENTORSHIP

- Shengwei Xu (Junior PhD Student at Michigan)

- David Gamba (Junior PhD Student at Michigan)

- Sanzeed Anwar (Junior PhD Student at Michigan)

- Behzad Nabawi (Undergrad at Sharif University of Technology)

SERVICE

Reviewer/PC member:

- International Conference on Learning Representations (**ICLR**): 2025
- The Annual Conference on Neural Information Processing Systems (**NeurIPS**): 2024
- The Web Conference (**WWW**): 2024, 2023, 2022
- The ACM Conference on Economics and Computation (**EC**): 2023, 2022
- Conference on Web and Internet Economics (**WINE**): 2024, 2023
- International Conference on Computational Social Science (**IC2S2**): 2024

Organizer:

- The 1st Annual Workshop on Incentives in Academia, jointly organized with EC 2024.