# 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-in-the-loop computing. 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** <span style="float:right">Sep 2024 - Present</span>

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

## EDUCATION

**University of Michigan, Ann Arbor (Umich)** <span style="float:right">Sep 2019 - Aug 2024</span>

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

**Shanghai Jiao Tong University (SJTU)** <span style="float:right">Aug 2015 - Jun 2019</span>

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

## WORKING EXPERIENCES

**University of Michigan, School of Information** <span style="float:right">Sep 2019 - Aug 2024</span>
Graduate Student Research Assistant, Useful Theory Innovation Lab

**UCLA, Department of Computer Science** <span style="float:right">Jul 2018 - Sep 2018</span>
Research Intern (The CSST program), working with Mario Gerla

**YITUTech** <span style="float:right">Feb 2019 - May 2019</span>
Algorithm Engineer Intern

## 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

**Peer Prediction on the Move: From Expected Score to Score Distribution**

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|---|---:|
| - Princeton University, Mechanism Design Group | November 2024 |

**High-Effort Crowds: Limited Liability Via Tournaments**

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|---|---:|
| - Rutgers University, the DIMACS Workshop on Forecasting | October 2024 |

**Eliciting Honest Information From Authors Using Sequential Review**

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|---|---:|
| - Princeton University, Mechanism Design 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**

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|---|---:|
| - 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

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|---|---:|
| **Teaching assistant (GSI), Umich** | **Winter 2022** |

*Courses:* Big Data Analysis (SI 699)
*Instructor:* Misha Teplitskiy

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|---|---:|
| **Teaching assistant (GSI), Umich** | **Fall 2021** |

*Course:* Deep Learning (SIADS 642)
*Instructor:* Paramveer Dhillon
*Course:* Network Analysis (SIADS 642)
*Instructor:* Daniel Romero

## AWARDS

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|---|---:|
| - 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)**: 2022 - 2025
- The ACM Conference on Economics and Computation **(EC)**: 2022, 2023
- Conference on Web and Internet Economics **(WINE)**: 2023 - 2025
- International Conference on Computational Social Science **(IC2S2)**: 2024

**Organizer**:

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