YICHI ZHANG

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SUMMARY

Ph.D. candidate with research focuses on the intersection between computer science and economics, in particular, information elicitation and aggregation, mechanism design and their interactions with machine learning. Comfortable in using programming and mathematical tools to solve multi-agent problems including crowdsourcing, peer grading, peer reviewing and recommender system. Experienced with big data analysis and causal analysis.

EDUCATION

University of Michigan, Ann Arbor (Umich) Sep 2019 - Present
Ph.D. in School of Information
Advisor: Prof. Grant Schoenebeck

Shanghai Jiao Tong University (SJTU) Aug 2015 - Jun 2019
B.S. in Electronic Science and Engineering
Advisor: Prof. Xinbing Wang and Prof. Luoyi Fu

University of California, Los Angeles (UCLA) Jul 2018 - Sep 2018
CSST (summer research program), Department of Computer Science
Advisor: Prof. Mario Gerla

EMPLOYMENT EXPERIENCES

Research Assistant, **University of Michigan** Sep 2019 - Present
Algorithm Engineer Intern, **YITUTech** Feb 2019 - May 2019

PUBLICATIONS AND PROJECTS

Information Elicitation From Rowdy Crowds WWW'21
Grant Schoenebeck, Fang-Yi Yu and **Yichi Zhang** (ranked by alphabet)

– Propose a framework of using robust learning algorithms to design robust peer prediction mechanisms that are robust against adversarial attacks.

A System-Level Analysis of Conference Peer Review ACM EC'22
Yichi Zhang, Fang-Yi Yu, Grant Schoenebeck and David Kempe

– Build a theoretical framework to study the review process of a conference with focus on how does the conference's acceptance policy affects the tradeoff between the conference quality and the review burden.

High-Effort Crowds: Limited Liability Via Tournaments WWW'23
Yichi Zhang and Grant Schoenebeck

– Consider how to optimally reward the crowdsoucing workers with the rank-order mechanisms given the noisy measurements of their effort.

Multi-task Peer Prediction Under Task-Dependent Strategies WWW'23
Yichi Zhang and Grant Schoenebeck

– Generalize the incentive guarantees to handle a much larger space of untruthful strategies.

COURSES (TAKEN)

Computer Science: machine learning, reinforcement learning, approximation algorithm, randomized algorithm.

Economics: advanced game theory (mechanism design), electronic commerce, digital public goods.

Statistics: Bayesian modeling.

TEACHING

I'm the teaching assistant (GSI) of the following courses:

- SIADS 642: Deep Learning with Prof. Paramveer Dhillon. Fall 2021
- SIADS 652: Network Analysis with Prof. Daniel Romero. Fall 2021
- SI 699: Big Data Analysis with Prof. Misha Teplitskiy. Winter 2022

AWARDS

- The Web Conference Student Scholarship. 2021
- EIC Education Scholarship (top 5%). 2018
- Samsung Scholarship (top 3%). 2017