

# YICHI ZHANG

+1(734)355-2810 [◇ yichiz@umich.edu](mailto:yichiz@umich.edu)

3339 North Quad, 510 State St., Ann Arbor, MI 48109, U.S.A.

## EDUCATION

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<b>University of Michigan, Ann Arbor (Umich)</b> Ph.D. in School of Information Advisor: Prof. Grant Schoenebeck	Sep 2019 - Present
<b>Shanghai Jiao Tong University (SJTU)</b> B.S. in Electronic Science and Engineering Advisor: Prof. Xinbing Wang and Prof. Luoyi Fu	Aug 2015 - Jun 2019
<b>University of California, Los Angeles (UCLA)</b> CSST (summer research program), Department of Computer Science Advisor: Prof. Mario Gerla	Jul 2018 - Sep 2018

## EMPLOYMENT EXPERIENCES

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Research Assistant, <b>University of Michigan</b>	Sep 2019 - Present
Algorithm Engineer Intern, <b>YITUTech</b>	Feb 2019 - May 2019

## RESEARCH PROJECTS (SELECTED)

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<b>Information Elicitation From Rowdy Crowds (Accepted to WWW 21)</b> <b>Umich</b> , with <i>Grant Schoenebeck and Fang-Yi Yu</i>	Sep 2019 - June 2020
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We consider the adversarial attack on crowdsourcing systems.

- Propose a framework for designing information elicitation mechanisms which can handle a fraction of adversarial agents who can collude and mess up the system.
- Based on the framework, use robust learning algorithms as the black box to design three mechanisms under two commonly used settings.
- Prove the truthfulness of the proposed mechanisms using probability theory and information theory as tools.

<b>Optimal scoring rule for information elicitation on Crowdsourcing</b> <b>Umich</b> , with <i>Grant Schoenebeck</i>	May 2020 - present
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In practice, we consider the problem of how to design optimal payment mechanisms for crowdsourcing workers which can minimize the overall payments.

- Review and summarize the state of art mechanisms with strong theoretical guarantees.
- Given a particular parametric model, use agent based model for synthetic data and compare the performances of different mechanisms with respect to the total payments to agents.
- Design a novel measure of the incentive robustness of mechanisms.

## COURSES (TAKEN)

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Computer Science: machine learning, reinforcement learning, approximation algorithm, randomized algorithm.  
Economics: advanced game theory (mechanism design), electronic commerce, digital public goods.

## AWARDS

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• EIC Education Scholarship (top 5%).	2018
• Samsung Scholarship (top 3%).	2017
• Meritorious Winner in Mathematical Contest in Modeling.	2017