Contact Northwestern University https://yingkai-li.github.io/homepage 2233 Tech Dr yingkai.li@u.northwestern.edu Information Evanston, IL 60201 Research Algorithmic game theory, mechanism design, microeconomic theory, online algorithms Interests **EDUCATION** Northwestern University, Evanston, IL Ph.D., Computer Science Expected: June 2022 Advisor: Jason D. Hartline Stony Brook University, Stony Brook, NY M.S., Computer Science May 2018 Shanghai Jiaotong University, Shanghai, China B.S., Major: Computer Science, Minor: Robotics (IEEE honor class) June 2015 Summer Intern Research Jun 2021 to Aug 2021 EXPERIENCE Microsoft Research New York Lab Host: Alex Slivkins **Summer Intern** Jun 2020 to Sep 2020 Microsoft Research New England Lab Host: Brendan Lucier, Nicole Immorlica, Moshe Babaioff Research Assistant Sep 2016 to Dec 2017 Department of Computer Science Stony Brook University Advisor: Jing Chen Visiting Student May to Jun 2017, 2018 School of Information Management and Engineering, Shanghai University of Finance and Economics Host: Pinyan Lu AWARDS Best Poster Award, EC 2020 2020 • Optimization of Scoring Rules. with Jason Hartline, Liren Shan and Yifan Wu Journal 1. Equilibrium Behaviors in Repeated Games. **PUBLICATIONS** with Harry Pei, JET 2021 2. Efficient Approximations for the Online Dispersion Problem. with Jing Chen and Bo Li, SICOMP 2019

CONFERENCE PUBLICATIONS

- 1. Revelation Gap for Pricing from Samples.

  with Yiding Feng and Jason Hartline, STOC 2021
- 2. Tight Regret Bounds for Infinite-armed Linear Contextual Bandits. with Yining Wang, Xi Chen and Yuan Zhou, AISTATS 2021
- 3. Benchmark Design and Prior-independent Optimization. with Jason Hartline and Aleck Johnsen, FOCS 2020

- 4. Multinomial Logit Bandit with Low Switching Cost.

  with Kefan Dong, Qin Zhang and Yuan Zhou, ICML 2020
- 5. Fair Resource Sharing and Dorm Assignments. with Bo Li, AAMAS 2020
- 6. Approximately Maximizing the Broker's Profit in a Two-sided Market. with Jing Chen and Bo Li, IJCAI 2019
- 7. Optimal Auctions vs. Anonymous Pricing: Beyond Linear Utility. with Yiding Feng and Jason Hartline, EC 2019
- 8. Nearly Minimax-Optimal Regret for Linearly Parameterized Bandits. with Yining Wang and Yuan Zhou, COLT 2019
- 9. Revenue Maximization with Imprecise Distribution. with Pinyan Lu and Haoran Ye, AAMAS 2019
- Information Elicitation for Bayesian Auctions.
   with Jing Chen and Bo Li, SAGT 2018
- Dynamic Fair Division Problem with General Valuations.
   with Bo Li and Wenyang Li, IJCAI 2018
- Bayesian Auctions with Efficient Queries.
   with Jing Chen, Bo Li and Pinyan Lu, ICALP 2018 (Brief Announcement)
- 13. Efficient Approximations for the Online Dispersion Problem. with Jing Chen and Bo Li, ICALP 2017

## Working Papers

- 1. Almost Proportional Allocations for Indivisible Chores.

  with Bo Li and Xiaowei Wu
- 2. Selling Data to an Agent with Endogenous Information.
- 3. On the Inefficiency of Auctions with Aftermarkets.

  with Moshe Babaioff, Nicole Immorlica and Brendan Lucier
- 4. Revenue Maximization for Buyers with Outside Options.

  with Yannai Gonczarowski, Nicole Immorlica and Brendan Lucier
- 5. Misspecified Beliefs about Time Lags. with Harry Pei
- 6. Fair Resource Sharing with Externailities. with Jiarui Gan and Bo Li
- 7. Optimization of Scoring Rules.

  with Jason Hartline, Liren Shan and Yifan Wu
- 8. Simple Mechanisms for Non-linear Agents. with Yiding Feng and Jason Hartline
- 9. Stochastic Linear Optimization with Adversarial Corruption. with Edmund Y. Lou and Liren Shan

ACADEMIC SERVICE Journal Reviewer

• Games and Economic Behavior, Transactions on Information Theory

Conference Reviewer

• STOC, EC, ICALP, ICML, ITCS, KDD, AISTATS, ESA, WINE, COCOA

TEACHING EXPERIENCE Teaching Assistant - Northwestern University

COMP\_SCI 396 - Online Markets Spring 2020

Instructor: Jason Hartline

COMP\_SCI 336 - Design & Analysis of Algorithms Fall 2019

Instructor: Jason Hartline

COMP\_SCI 212 - Mathematical Foundations of Computer Science Spring 2019

Instructor: Aravindan Vijayaraghavan

Teaching Assistant - Stony Brook University

CSE 215 - Foundations of Computer Science Fall 2015, Spring 2016

Instructor: Himanshu Gupta; Paul Fodor

CSE 114 - Computer Science I Spring 2016

Instructor: Paul Fodor

CSE 540 - Theory of Computation Fall 2016

Instructor: Jing Chen