CONTACT Northwestern University https://yingkai-li.github.io/homepage
INFORMATION 2233 Tech Dr yingkai.li@u.northwestern.edu
Evanston, IL 60201

RESEARCH INTERESTS EDUCATION Algorithmic game theory, mechanism design, microeconomic theory, online algorithms

Northwestern University, Evanston, IL

Ph.D., Computer Science Expected: May 2023

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

RESEARCH EXPERIENCE Summer Intern Jun 2020 to Sep 2020

Microsoft Research New England Lab Host: Brendan Lucier, Nicole Immorlica

Research Assistant Sep 2016 to Dec 2017

Department of Computer Science,

Stony Brook University Advisor: Jing Chen

Visiting Student May to Jun 2017, 2018

2020

School of Information Management and Engineering, Shanghai University of Finance and Economics

Host: Pinyan Lu

AWARDS Best Poster Award, EC 2020

• Optimization of Scoring Rules. with Jason Hartline, Liren Shan and Yifan Wu

Journal Publications

1. Equilibrium Behaviors in Repeated Games.

with Harry Pei, forthcoming at JET

 $2.\,$ Efficient Approximations for the Online Dispersion Problem.

with Jing Chen and Bo Li, SICOMP 2019

Conference Publications 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
- 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. On the Inefficiency of Auctions with Aftermarkets.

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

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

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

 with Edmund Y. Lou and Liren Shan

ACADEMIC SERVICE

Reviewer

• GEB, TIT, STOC, EC, ICALP, ICML, AISTATS, ESA, ITCS, 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