Yingkai Li

CONTACT INFORMATION	Computer Science, Yale University 17 Hillhouse Ave, Room 330 New Haven, CT 06511	https://yingkai-li.github.io/homepage yingkai.li@yale.edu CV - newest version
RESEARCH INTERESTS	Algorithmic game theory, mechanism design, microeconomic theory, online algorithms	
EMPLOYMENT	Postdoc Associates, Cowles Foundation for Research in Economics, Yale Univerisity	2022 - 2024

EDUCATION

Northwestern University, Evanston, IL, USA — June 2022

    Ph.D., Computer Science
    Advisor: Jason D. Hartline

Stony Brook University, Stony Brook, NY, USA — May 2018

    M.S., Computer Science

Shanghai Jiaotong University, Shanghai, China — June 2015

    B.S., Major: Computer Science, Minor: Robotics (IEEE honor class)

RESEARCH EXPERIENCE

Research Intern — Jun to Aug 2020, 2021
    Microsoft Research New England Lab and New York Lab

Visiting Student — May to Jun 2017, 2018
    School of Information Management and Engineering
    Shanghai University of Finance and Economics

AWARDS

Northwestern Terminal Year Fellowship — 2021

JOURNAL PUBLICATIONS

1. Your College Dorm and Dormmates: Fair Resource Sharing with Externalities.
   with Jiarui Gan and Bo Li, JAIR 2023

2. Nearly Minimax-Optimal Regret for Linearly Parameterized Bandits.
   with Yining Wang and Yuan Zhou, TIT 2023

3. Bayesian Auctions with Efficient Queries.
   with Jing Chen, Bo Li and Pinyan Lu, AIJ 2022

4. Equilibrium Behaviors in Repeated Games.
   with Harry Pei, JET 2021

5. Efficient Approximations for the Online Dispersion Problem.
   with Jing Chen and Bo Li, SICOMP 2019

CONFERENCE PUBLICATIONS

1. Revenue Maximization for Buyers with Costly Participation.
   with Yannai Gonczarowski, Nicole Immorlica and Brendan Lucier, SODA 2024

2. Optimal Scoring Rules for Multi-dimensional Effort.
   with Jason Hartline, Liren Shan and Yifan Wu, COLT 2023

3. Bayesian Analysis of Linear Contracts.
   with Tal Alon, Paul Dütting and Inbal Talgam-Cohen, EC 2023

4. Making Auctions Robust to Aftermarkets.
   with Moshe Babaioff, Nicole Immorlica and Brendan Lucier, ITCS 2023

5. Budget Pacing in Repeated Auctions: Regret and Efficiency without Convergence.
   with Jason Gaitonde, Bar Light, Brendan Lucier and Alex Slivkins, ITCS 2023

6. Simple Mechanisms for Non-linear Agents.
   with Yiding Feng and Jason Hartline, SODA 2023

7. Selling Data to an Agent with Endogenous Information. EC 2022

8. Optimization of Scoring Rules.
   with Jason Hartline, Liren Shan and Yifan Wu, EC 2022 (Best Poster Award, EC 2020)

9. Almost Proportional Allocations for Indivisible Chores.
   with Bo Li and Xiaowei Wu, WebConf 2022

10. Revelation Gap for Pricing from Samples.
    with Yiding Feng and Jason Hartline, STOC 2021

11. Tight Regret Bounds for Infinite-armed Linear Contextual Bandits.
    with Yining Wang, Xi Chen and Yuan Zhou, AISTATS 2021

12. Benchmark Design and Prior-independent Optimization.
    with Jason Hartline and Aleck Johnsen, FOCS 2020

13. Multinomial Logit Bandit with Low Switching Cost.
    with Kefan Dong, Qin Zhang and Yuan Zhou, ICML 2020

14. Fair Resource Sharing and Dorm Assignments.
    with Bo Li, AAMAS 2020

15. Approximately Maximizing the Broker's Profit in a Two-sided Market.
    with Jing Chen and Bo Li, IJCAI 2019

16. Optimal Auctions vs. Anonymous Pricing: Beyond Linear Utility.
    with Yiding Feng and Jason Hartline, EC 2019

17. Nearly Minimax-Optimal Regret for Linearly Parameterized Bandits.
    with Yining Wang and Yuan Zhou, COLT 2019

18. Revenue Maximization with Imprecise Distribution.
    with Pinyan Lu and Haoran Ye, AAMAS 2019

19. Information Elicitation for Bayesian Auctions.
    with Jing Chen and Bo Li, SAGT 2018

20. Dynamic Fair Division Problem with General Valuations.
    with Bo Li and Wenyang Li, IJCAI 2018

21. Bayesian Auctions with Efficient Queries.
    with Jing Chen, Bo Li and Pinyan Lu, ICALP 2018 (Brief Announcement)

22. Efficient Approximations for the Online Dispersion Problem.
    with Jing Chen and Bo Li, ICALP 2017

WORKING PAPERS	1. Optimal Scoring for Dynamic Information Acquisition. (Job Market Paper)
	with Jonathan Libgober
	2. Optimal Mechanism Design with Endogenous Principal Learning.
	with Daniel Clark
	3. Scale-robust Auctions.
	with Jason Hartline and Aleck Johnsen
	4. Test Design without Commitment.
	with Boli Xu
	5. Contests as Optimal Mechanisms Under Signal Manipulation.
	with Xiaoyun Qiu
	6. Incentivizing Participation in Clinical Trials.
	with Alex Slivkins
	7. Misspecified Beliefs about Time Lags.
	with Harry Pei

ACADEMIC
SERVICE

Program Committee
- WINE 2023, EC 2023, WebConf 2023, WINE 2022

Journal Reviewer
- American Economic Review: Insight, Journal of Economic Theory, Journal of the ACM, SIAM Journal on Computing, Games and Economic Behavior, Mathematics of Operations Research, Transactions on Information Theory, Transactions on Economics and Computation

Conference Reviewer
- STOC, SODA, EC, ICALP, ICML, ITCS, KDD, AISTATS, ESA, WebConf, WINE, COCOA

TEACHING
EXPERIENCE

Teaching Assistant - Northwestern University

COMP_SCI 396 - Online Markets	Spring 2020
COMP_SCI 336 - Design & Analysis of Algorithms	Fall 2019
COMP_SCI 212 - Mathematical Foundations of Computer Science	Spring 2019

Teaching Assistant - Stony Brook University

CSE 215 - Foundations of Computer Science	Fall 2015, Spring 2016
CSE 114 - Computer Science I	Spring 2016
CSE 540 - Theory of Computation	Fall 2016