

# Yingkai Li

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CONTACT INFORMATION	Computer Science, Yale University 51 Prospect St, Room 510 New Haven, CT 06511	<a href="https://yingkai-li.github.io/homepage">https://yingkai-li.github.io/homepage</a> yingkai.li@yale.edu
RESEARCH INTERESTS	Algorithmic game theory, mechanism design, microeconomic theory, online algorithms	
EMPLOYMENT	Postdoc Associates, Cowles Foundation for Research in Economics, Yale University	2022 - 2024
EDUCATION	<b>Northwestern University</b> , Evanston, IL, USA Ph.D., Computer Science Advisor: Jason D. Hartline <b>Stony Brook University</b> , Stony Brook, NY, USA M.S., Computer Science <b>Shanghai Jiaotong University</b> , Shanghai, China B.S., Major: Computer Science, Minor: Robotics (IEEE honor class)	June 2022  May 2018  June 2015
RESEARCH EXPERIENCE	<b>Research Intern</b> Microsoft Research New England Lab and New York Lab <b>Visiting Student</b> School of Information Management and Engineering Shanghai University of Finance and Economics	Jun to Aug 2020, 2021  May to Jun 2017, 2018
AWARDS	Northwestern Terminal Year Fellowship	2021
JOURNAL PUBLICATIONS	<ol style="list-style-type: none"><li>1. Bayesian Auctions with Efficient Queries. <i>with Jing Chen, Bo Li and Pinyan Lu</i>, AIJ 2022</li><li>2. Equilibrium Behaviors in Repeated Games. <i>with Harry Pei</i>, JET 2021</li><li>3. Efficient Approximations for the Online Dispersion Problem. <i>with Jing Chen and Bo Li</i>, SICOMP 2019</li></ol>	
CONFERENCE PUBLICATIONS	<ol style="list-style-type: none"><li>1. Selling Data to an Agent with Endogenous Information. EC 2022</li><li>2. Optimization of Scoring Rules. <i>with Jason Hartline, Liren Shan and Yifan Wu</i>, EC 2022 (Best Poster Award, EC 2020)</li><li>3. Almost Proportional Allocations for Indivisible Chores. <i>with Bo Li and Xiaowei Wu</i>, WebConf 2022</li><li>4. Revelation Gap for Pricing from Samples. <i>with Yiding Feng and Jason Hartline</i>, STOC 2021</li><li>5. Tight Regret Bounds for Infinite-armed Linear Contextual Bandits. <i>with Yining Wang, Xi Chen and Yuan Zhou</i>, AISTATS 2021</li></ol>	

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

WORKING PAPERS

1. Budget Pacing in Repeated Auctions: Regret and Efficiency without Convergence.  
*with Jason Gaitonde, Bar Light, Brendan Lucier and Alex Slivkins*
2. Incentivizing Participation in Clinical Trials.  
*with Alex Slivkins*
3. Making Carbon-Allowance Auctions Robust to 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. Simple Mechanisms for Non-linear Agents.  
*with Yiding Feng and Jason Hartline*

ACADEMIC  
SERVICE

Program Committee

- WINE 2022

Journal Reviewer

- American Economic Review: Insight, SIAM Journal on Computing, Games and Economic Behavior, 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