Yanchen Jiang (Jeff Jiang)

Harvard University
Cambridge MA 02138 USA

yanchen_jiang@g.harvard.edu
https://yanchenjiang.github.io/

Research Overview

My research lies at the intersection of computer science—specifically machine learning, deep learning, and generative AI—and economics, focusing on mechanism design, incentives, and decision-making. I employ computational frameworks to tackle established problems in economics and mechanism design, deriving novel insights and solutions in unexplored settings. Additionally, I integrate considerations of incentives, human behavior, game theory, and multi-agent interactions into large language models (LLMs) and generative AI, to enhance their applicability in complex economic environments.

Research Interests: Computational Mechanism Design, Large Language Models and Generative AI, Machine Learning, Deep Learning.

Skills:

Proficient: Python (familiar with ML/DL libraries: PyTorch/NumPy/Transformers/Matplotlib/...); LaTeX; Experience with LLMs and Language Model APIs (inference-time scaling, supervised fine-tuning, RLHF).

Education

Ph.D. Computer Science 2022-2027 (expected)	**Harvard University** Advisors: Professor David C. Parkes and Professor Yiling Chen Anticipated Graduation Date: May 2027
S.M. Computer Science 2024	**Harvard University** Advisors: Professor David C. Parkes and Professor Yiling Chen
A.B. 2022	**Harvard University** Major: Computer Science and Mathematics; Minor: Statistics Thesis: *Learning to Sell Information* Highest Honors in Computer Science and Mathematics, *cum laude* GPA: 3.89/4.00

Publications and Working Papers

(* indicates equal contribution, α-β indicates alphabetical author order.)

Journal Papers, Journal Survey Papers, and Research Letters

J1 Michael J. Curry, Zhou Fan, Yanchen Jiang, Sai Srivatsa Ravindranath, Tonghan Wang, David C. Parkes. Automated Mechanism Design: A Survey. *ACM SIGecom Exchanges, volume 22, issue 2, March 2025.*

Selected Conference Publications

S3 Tonghan Wang, Yanchen Jiang, David C. Parkes. BundleFlow: Deep Menus for Combinatorial Auctions by Diffusion-Based Optimization. *Advances in Neural Information Processing Systems 38 (NeurIPS 2025). To appear.*

S2 Tonghan Wang*, Yanchen Jiang* , David C. Parkes. GemNet: Menu-Based, Strategy-Proof Multi-Bidder Auctions Through Deep Learning. *The Twenty-Fifth ACM Conference on Economics and Computation (ACM EC '24)*, Received ***Exemplary Paper Award*** for the AI track *(awarded to the top paper in track)*, presented at the Best EC '24 papers plenary session.

S1 Sai Srivatsa Ravindranath*, Yanchen Jiang* , David C. Parkes. Data Market Design through Deep Learning. *Advances in Neural Information Processing Systems 36 (NeurIPS 2023).*

Other Conference Publications

C1 Tonghan Wang*, Heng Dong*, Yanchen Jiang, David C. Parkes, Milind Tambe. On Diffusion Models for Multi-Agent Partial Observability: Shared Attractors, Error Bounds, and Composite Flow. *24th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2025), Oral Presentation.*

Workshop and Exhibition papers

W2 (α-β) Constantinos Daskalakis, Ian Gemp, Yanchen Jiang, Renato Paes Leme, Christos Papadimitriou, Georgios Piliouras. Charting the Shapes of Stories with Game Theory. *NeurIPS 2024 Creative AI.* Preprint.

W1 Anand Shah*, Kehang Zhu*, Yanchen Jiang, Kerem Dayi, Jeffery Wang, John J. Horton, David C. Parkes. Evidence from the Synthetic Laboratory: Language Models as Auction Participants. *EC'24 contributed poster session; NeurIPS 2024 Workshop on Behavioral Machine Learning.*

Preprints and Working Papers

P2 Yanchen Jiang, Zhe Feng, Aranyak Mehta. Incentive-Aligned Multi-Source LLM Summaries.

P1 Ermis Soumalias* Yanchen Jiang*, Kehang Zhu*, Michael Curry, Sven Seuken, David C. Parkes. LLM-Powered Preference Elicitation in Combinatorial Assignment.

Research Internships

Google Research *Mountain View, CA*
Full-time On-site Student Researcher *May - Sep, 2025*
Part-time Remote Student Researcher *Sep 2025 - Jan 2026*

Honors

Exemplary Paper Award, for the AI track *July, 2024*
The Twenty-Fifth ACM Conference on Economics and Computation (EC '24)

Head Teaching Fellow *Fall, 2023*
Harvard University, CS136 (Economics and Computation)

Talks and Presentations

GemNet: Menu-Based, Strategy-Proof Multi-Bidder Auctions Through Deep Learning
The Twenty-Fifth ACM Conference on Economics and Computation (EC'24) *New Haven, CT*
Best EC '24 papers plenary session (Short Presentation)

Main Conference (Long Talk) July, 2024

The Econometric Society 2024 ESIF Economics and AI+ML Meeting *Ithaca, NY*
Mechanism Design session (*Session Chair*, Long Talk) August, 2024

Harvard EconCS seminar
Long Talk Nov, 2024

Data Market Design through Deep Learning

2023 Conference on Neural Information Processing Systems (NeurIPS 2023) *New Orleans, LA*
Main Conference (Poster Session Presentation) Dec, 2023

The Econometric Society 2024 ESIF Economics and AI+ML Meeting *Ithaca, NY*
Pricing in Markets session (Long Talk) August, 2024

Charting the Shapes of Stories with Game Theory

2024 Conference on Neural Information Processing Systems (NeurIPS 2024) *Vancouver, Canada*
Creative AI (Booth Presentation) Dec, 2024

On Diffusion Models for Multi-Agent Partial Observability: Shared Attractors, Error Bounds, and Composite Flow

24th International Conference on Autonomous Agents and Multiagent Systems
(AAMAS 2025) *Detroit, MI*
Oral Presentation (Short Talk)
Poster Session Presentation May, 2025

Reviewing activities

Journal referee

Econometrica

TMLR

Conference review

NeurIPS (2024) *(Top Reviewers)*, ICLR (2025), AISTATS (2025), ICML (2025), NeurIPS (2025) [Main Track, and Creative AI Track], ICLR (2026), AISTATS (2026), AAAI (2026).

Teaching

CS2360R (Topics at the Interface between Computer Science and Economics) Fall, 2025
Emerging Topics in EconCS and AI
Teaching Fellow, Harvard University. Fall, 2025

CS136 (Economics and Computation) Fall, 2023
Head Teaching Fellow, Harvard University.

CS136 (Economics and Computation) Fall, 2021
Teaching Fellow, Harvard University.