

# Zhou Fan

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## Education

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### Harvard University

Ph.D. Student in Computer Science

- Member of the [EconCS research group](#).
- Advised by [Prof. David C. Parkes](#).

Sept. 2020 - Present

### Shanghai Jiao Tong University

Bachelor of Engineering (B.Eng.) in Computer Science

- Member of **ACM Honors Class**, which is an elite CS program for top 5% talented students.
- GPA: **94.23 / 100**, Ranking: **1 / 38**

Sept. 2016 - June 2020

## Research Interests

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Mechanism design, decentralized finance, algorithmic game theory, multi-agent systems, and machine learning methods such as reinforcement learning and Bayesian optimization.

## Experience

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### ByteDance

Algorithm Engineer Intern

- Worked on development and research on merging recommendation feeds with advertising contents.

Mar 2020 - June 2020

### Jane Street

Quantitative Trading Intern

- Basic training of quantitative trading.
- Worked as a research intern in the second half of the internship on an experimental project of quantitative trading research.

Jan 2020 - Feb 2020

### Carnegie Mellon University

Research Intern advised by [Prof. Fei Fang](#)

- Research topic: (multi-agent) reinforcement learning and game theory
- Worked on a project on finding approximate Stackelberg-Nash equilibria of single-leader multiple-follower Stackelberg games.

July 2019 - Dec 2019

### Shanghai Jiao Tong University

Undergraduate Researcher at [APEX Lab](#), advised by [Prof. Weinan Zhang](#)

- Research topic: deep reinforcement learning
- Worked on a project about reinforcement learning algorithms in environments with parameterized action space.

July 2018 - June 2019

## Selected Publications

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### HyperBO+: Pre-training a universal hierarchical Gaussian process prior for Bayesian optimization [\(Link\)](#)

Zhou Fan<sup>\*</sup>, Xinran Han, and Zi Wang

NeurIPS 2022 Workshop

### Differential Liquidity Provision in Uniswap v3 and Implications for Contract Design [\(Link\)](#)

Zhou Fan<sup>\*</sup>, Francisco Marmolejo-Cossío<sup>\*</sup>, Ben Altschuler, He Sun, Xintong Wang and David C. Parkes

ICAIF 2022

### Hybrid Actor-Critic Reinforcement Learning in Parameterized Action Space [\(Link\)](#)

Zhou Fan<sup>\*</sup>, Rui Su<sup>\*</sup>, Weinan Zhang and Yong Yu

IJCAI 2019

## Honors & Awards

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SCHOLARSHIP

2020	<b>Excellent Graduate Award of Shanghai</b> (The highest honor for college graduates in Shanghai)	Shanghai
2020	<b>Zhiyuan Outstanding Student Scholarship</b> (Outstanding graduates of Zhiyuan College, SJTU)	SJTU
2019	<b>SenseTime Scholarship for Undergraduate AI Researchers</b> (30 winners nationwide each year)	SenseTime
2019	<b>National Scholarship of China</b> (Top 0.2% nationwide)	China
2018	<b>Fan Hsu-Chi Scholarship</b> (About 10 winners every year at SJTU)	SJTU
2018	<b>Zhiyuan Honorary Scholarship</b>	SJTU
2017	<b>National Scholarship of China</b> (Top 0.2% nationwide)	China
2017	<b>Han-Ying-Ju-Hua Scholarship</b>	SJTU
2017	<b>Zhiyuan Honorary Scholarship</b>	SJTU

## PROGRAMMING COMPETITION

- July 2015 **Bronze Medal**, The 32nd China National Olympiad in Informatics (NOI)
- May 2015 **Silver Medal**, The 9th Asia and Pacific Informatics Olympiad (APIO)
- May 2015 **Silver Medal**, China Team Selection Competition for IOI 2016 (CTSC)
- Feb. 2015 **Second Prize**, National Olympiad in Informatics Winter Campus 2015

## Other Experience

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### SJTU \*NIX User Group (SJTUG) [\(Link\)](#)

June 2018 - July 2020

*President*

- SJTUG is a student techie group at Shanghai Jiao Tong University that holds regular campus events to discuss various topics including open source, software engineering and computer science research.