# Jiawei Li

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#### Education

**University of Texas, Austin, CS Department** Ph.D. in progress Advisor: Prof. Scott Aaronson

#### Peking University, School of EECS, Turing Class

Bachelor's in science, Overall GPA: 3.73/4.0

## **Research Interests**

Currently: Classical and Quantum Computational Complexity; AI Safety / Alignment / Interpretability.

Previously: Algorithmic Game Theory, Optimization, Approximation Algorithm.

## **Publications and Preprints**

[1]. On the Approximation of Nash Equilibria in Sparse Win-Lose Multi-player Games. Zhengyang Liu, Jiawei Li, and Xiaotie Deng. AAAI-21.

[2]. The Query Complexity of Local Search and Brouwer in Rounds. Simina Brânzei, Jiawei Li. COLT-22, Minor revision in Mathematical Statistics and Learning.

#### [3]. **Consensus Division in an Arbitrary Ratio.** Paul Goldberg, Jiawei Li. **ITCS-23**.

[4]. **Pandora Box Problem with Nonobligatory Inspection: Hardness and Improved Approximation Algorithms.** Hu Fu, Jiawei Li, and Daogao Liu. **STOC-23** 

[5]. Total NP Search Problems with Abundant Solutions Jiawei Li. ITCS-24

[6]. **On Pigeonhole Principles and Ramsey in TFNP** Siddhartha Jain, Jiawei Li, Robert Robere, Zhiyang Xun. **FOCS-24**.

[7]. **Metamathematics of Resolution Lower Bounds: A TFNP Perspective** Jiawei Li, Yuhao Li, Hanlin Ren. Preprint.

#### [8]. Quantum Communication Advantage in TFNP

Mika Göös, Tom Gur, Siddhartha Jain, Jiawei Li. STOC-2025 & QIP-2025.

# Service

Teaching Assistant, Approximation Algorithm, UT Austin	Spring 2023
Teaching Assistant, Quantum Information Science I, UT Austin	Fall 2022
Teaching Assistant, Discrete Math II, Peking University, Turing Class	Spring 2019
Conference: reviewer for ICALP 2019, ITCS 2024, STOC 2024, CCC 2024, ITCS 2025, STOC 202	5
Journal: sub-reviewer for TCS, SICOMP	

Awards and Honors

ICPC North America Championship, 13th Place (Advanced to World Finals)	2022/05
ICPC South Central USA Regional Contest, 2nd Place	2022/03
"Fangzheng" Scholarship in EECS, Peking University	2019/10
ICPC, Qingdao Regional, Gold Prize	2018/10
First price of "PDZF" Scholarship in EECS, Peking University	2018/10
National Olympiad in Informatics 2015: Gold Prize	2015/07

2022/01 -

2016/09 - 2020/07