

Liyan Chen

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EDUCATION

Massachusetts Institute of Technology

2025.09 - Present

PhD in Computer Science

Advised by Vinod Vaikuntanathan and Yael Tauman Kalai

Tsinghua University

2021.09 - 2025.06

Bachelor of Engineering in Computer Science (Yao Class), GPA: 3.93/4.0

Relevant Courses: Machine Learning (A+), Algorithm Design (A+), Theory of Computation (A+), Fundamentals of Cryptography (A)

RESEARCH INTERESTS

Cryptography in general. I am currently excited about:

- How foster collaboration in untrusted parties, say via proof systems?
- Can we apply cryptography to address questions in other scientific fields, say AI safety?

PUBLICATIONS

Authors listed in alphabetical order.

- **On the Impossibility of SNARGs with Short CRS**
(or: Revisiting Gentry-Wichs Barrier in the Non-adaptive Setting)
Liyan Chen, Zhengzhong Jin.
To appear in *FOCS*, 2025.
- **Unambiguous SNARGs for P from LWE with Applications to PPAD Hardness**
Liyan Chen, Cody Freitag, Zhengzhong Jin and Daniel Wichs.
In *Proc. STOC*, 2025.
- **Succinct Non-interactive Argument of Proximity**
Liyan Chen, Zhengzhong Jin and Daniel Wichs.
In *Proc. STOC*, 2025.
- **Setting Targets is All You Need:**
Improved Order Competitive Ratio for Online Selection
Liyan Chen, Nuo Zhou Sun and Zhihao Gavin Tang.
In *Proc. Economics and Computation*, 2024.

HONORS AND AWARDS (SELECTED)

- **Yao Award (Bronze Medal)** 2024
Awarded to 5 students in Yao Class in 2024
- **Chinese National Olympiad in Informatics, Gold Medal** 2019

TEACHING EXPERIENCE

- **Teaching Assistant of *Fundamentals of Cryptography*** Spring 2025
At Tsinghua. Instructor: Prof. Yilei Chen

PROFESSIONAL ACTIVITIES AND SERVICE

- **Conference Reviewing:** CRYPTO 2025; PKC 2025; TCC 2025; ASIACRYPT 2025