# Hanlin Ren

https://hanlin-ren.github.io/
Last updated: Nov 2020

#### **Education**

August 2016 - Present

📘 Tsinghua University, China

**Bachelor of Engineering** 

Major: Computer Science (Special Pilot CS Class, a.k.a Yao Class)

GPA: 3.83/4; rank: 8/38

#### **Research Interests**

I am interested in Algorithm Design and Computational Complexity.

#### **Publications**

(Note: in Theoretical Computer Science, the list of authors are usually sorted in alphabetical order.)

- Ran Duan, Yong Gu, and **Hanlin Ren**. Approximate Distance Oracles Subject to Multiple Vertex Failures. In *Proceedings of the 32nd ACM-SIAM Symposium on Discrete Algorithms* (SODA), 2021.
- **Hanlin Ren**. Improved Distance Sensitivity Oracles with Subcubic Preprocessing Time. In *Proceedings of the 28th Annual European Symposium on Algorithms (ESA)*, 2020.
- Lijie Chen and Hanlin Ren. Strong Average-Case Circuit Lower Bounds from Non-trivial Derandomization. In *Proceedings of the 52nd Annual ACM Symposium on Theory of Comput*ing (STOC), 2020.

Invited to the SICOMP special issue for STOC 2020

Ran Duan and **Hanlin Ren**. Approximating All-Pair Bounded-Leg Shortest Path and APSP-AF in Truly-Subcubic Time. In *Proceedings of the 45th International Colloquium on Automata, Languages, and Programming (ICALP)*, 2018.

#### **Academic Talks**

Sep 2020 Improved Distance Sensitivity Oracles with Subcubic Preprocessing Time. ESA 2020 (virtual talk). https://youtu.be/2Z46AybFkJ8.

Jun 2020 Strong Average-Case Circuit Lower Bounds from Non-trivial Derandomization. STOC 2020 (virtual talk). https://youtu.be/xWDQ4Lef0Vs.

Mar 2020 Strong Average-Case Circuit Lower Bounds from Non-trivial Derandomization. Special Interest Group on Mathematics & Algorithms, Institute of Computing Technology, Chinese Academy of Science (virtual talk).

Jul 2018 Approximating All-Pair Bounded-Leg Shortest Path and APSP-AF in Truly-Subcubic Time.
ICALP 2018, Prague, Czech Republic.

### **Selected Awards**

Sep 2019 | Yao Award, bronze prize

## **Selected Awards (continued)**

Sep 2017 Raidu "Future Star" Scholarship

Jul 2015 Gold medal (15th place) in Chinese National Olympiad in Informatics (NOI)

## Languages

Chinese native

English TOEFL 110 (Reading 30 + Listening 29 + Speaking 23 + Writing 28, May 2019)

### Misc

GRE score (May 2019): Verbal 161, Quantitative 170, AW 4.0