# Hanlin Ren

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1 Last updated: Oct 2020

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#### **Education**

August 2016 - Present

Tsinghua University, China

**Bachelor of Engineering** 

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

### **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 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.
- 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 Computing (STOC), 2020.
- **Hanlin Ren**. Improved Distance Sensitivity Oracles with Subcubic Preprocessing Time. In *Proceedings of the 28th Annual European Symposium on Algorithms (ESA)*, 2020.
- 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.

#### **Academic Talks**

Jul 2018 Approximating All-Pair Bounded-Leg Shortest Path and APSP-AF in Truly-Subcubic Time.

ICALP 2018, Prague, Czech Republic.

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).

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

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

### **Selected Awards**

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

Sep 2017 | Baidu "Future Star" Scholarship

Sep 2018 | Evergrande Scholarship

# **Selected Awards (continued)**

Sep 2019 Xao Award, bronze prize

# 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