

Chunyang Wang

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EDUCATION

Ph.D in Computer Science

09/2020 - 08/2025 (Expected)

Nanjing University

- Field: Theoretical Computer Science
- Advisor: Yitong Yin

B.Sc in Computer Science

09/2016 - 08/2020

Nanjing University

RESEARCH INTERESTS

- Counting and sampling algorithms
- Discrete probability

SELECTED AWARDS & HONORS

The 45th International Collegiate Programming Contest Shenyang Regional

2021-07-18

2nd Place, Gold Medal

Liaoning, China

The 47th International Collegiate Programming Contest, Nanjing Regional

2022-12-18

2nd Place, Gold Medal

Jiangsu, China

The 47th International Collegiate Programming Contest, World Finals

2024-04-15

6th Place, Silver Medal

Luxor, Egypt

National Scholarship (2023)

2023-10-12

PUBLICATIONS

1. Kun He, Chunyang Wang, Yitong Yin.
Sampling Lovász local lemma for general constraint satisfaction solutions in near-linear time.
In **FOCS** 2022: 147-158.
2. Kun He, Chunyang Wang, Yitong Yin.
Deterministic counting Lovász local lemma beyond linear programming.
In **SODA** 2023: 3388-3425.
3. Weiming Feng, Heng Guo, Chunyang Wang, Jiaheng Wang, Yitong Yin.
Towards derandomising Markov chain Monte Carlo.
In **FOCS** 2023: 1963-1990.
4. Chunyang Wang, Yitong Yin.
A Sampling Lovász Local Lemma for Large Domain Sizes.
In **FOCS** 2024: 129-150

PREPRINTS

1. Aditya Lonkar, Zongchen Chen, Chunyang Wang, Kuan Yang, Yitong Yin.
Counting random k -SAT near the satisfiability threshold.
arXiv:2411.02980, to appear in **STOC** 2025
2. Jingcheng Liu, Chunyang Wang, Yixiao Yu, Yitong Yin.
Phase Transitions via Complex Extensions of Markov Chains.
arXiv:2411.06857, to appear in **STOC** 2025
3. Hongyang Liu, Chunyang Wang, Yitong Yin.
Local Gibbs sampling beyond local uniformity.
arXiv:2502.10795, submitted

4. Konrad Anand, Graham Freifeld, Heng Guo, Chunyang Wang, Jiaheng Wang
Sink-free orientations: a local sampler with applications
arXiv:2502.05877, submitted

TALKS

Counting random k -SAT near the satisfiability threshold.

LFCS Seminar, University of Edinburgh, Edinburgh, UK, 2024

A Sampling Lovász Local Lemma for Large Domain Sizes.

ACO Seminar, Georgia Institute of Technology, Atlanta, USA, 2024

FOCS, Chicago, Illinois, USA, 2024

Theory Student Day, University of Science and Technology of China, Hefei, Anhui, China, 2025

Towards derandomising Markov chain Monte Carlo.

MCMC 2.0 Workshop, NII Shonan Meeting, Shonan, Japan, 2023

FOCS, Santa Cruz, California, USA, 2023

Deterministic counting Lovász local lemma beyond linear programming.

SODA, Online, 2023

A sampling Lovász local lemma.

2023 CCF Forum for Distinguished Ph.D. Candidates in Theoretical Computer Science, Hong Kong, China, 2023

TEACHING ASSISTANTSHIPS

Advanced Algorithms (Fall 2020)

Nanjing University

Instructor: Yitong Yin

Advanced Algorithms (Fall 2022)

Nanjing University

Instructor: Yitong Yin

Combinatorics (Spring 2023)

Nanjing University

Instructor: Yitong Yin

Combinatorics (Spring 2024)

Nanjing University

Instructor: Yitong Yin

SERVICES

Reviewing:

Conference: TAMC 2024, ITCS 2025, STOC 2025

Journal: TALG 2024