# **Chunyang Wang**

wcysai@smail.nju.edu.cn \( +8613770780648 \( \rightarrow \) Homepage \( \rightarrow \) Google scholar Last updated: Oct. 2025

#### WORK EXPERIENCE

Project Researcher 11/2025 - Now

National Institute of Informatics

• Host: Yuichi Yoshida

## **EDUCATION**

# Ph.D in Computer Science 09/2020 - 07/2025

Nanjing University

• Field: Theoretical Computer Science

Advisor: Yitong Yin

# **B.Sc in Computer Science**

09/2016 - 07/2020

Nanjing University

## RESEARCH INTERESTS

- Counting and sampling algorithms
- Discrete probability

#### Selected Awards & Honors

The 45th International Collegiate Programming Contest, Shenyang Regional 2nd Place, Gold Medal	2021-07-18 Liaoning, China
The 47th International Collegiate Programming Contest, Nanjing Regional 2nd Place, Gold Medal	2022-12-18 Jiangsu, China
The 47th International Collegiate Programming Contest, World Finals 6th Place, Silver Medal	2024-04-15 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 SICOMP 2025: 775-813 (preliminary version in FOCS 2023: 1963-1990)

4. Chunyang Wang, Yitong Yin.

A Sampling Lovász Local Lemma for Large Domain Sizes.

in FOCS 2024: 129-150

5. Aditya Lonkar, Zongchen Chen, Chunyang Wang, Kuan Yang, Yitong Yin.

Counting random k-SAT near the satisfiability threshold.

in STOC 2025: 867-878

6. Jingcheng Liu, Chunyang Wang, Yixiao Yu, Yitong Yin.

Phase Transitions via Complex Extensions of Markov Chains.

in STOC 2025: 903-914

7. Konrad Anand, Graham Freifeld, Heng Guo, Chunyang Wang, Jiaheng Wang. *Sink-free orientations: a local sampler with applications* in **RANDOM** 2025: 60:1–60:19

## **PREPRINTS**

1. Hongyang Liu, Chunyang Wang, Yitong Yin. *Local Gibbs sampling beyond local uniformity*. arXiv:2502.10795, to appear in **SODA** 2026

## **TALKS**

Counting random k-SAT near the satisfiability threshold.

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

Complexity & Algorithms Workshop, Sun Yat-sen University, Guangzhou, Guangdong, China, 2025

STOC, Prague, Czech Republic, 2025

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