

XIONGXIN YANG

📞 (+86) 177-6554-5809

✉️ yangxx0405@gmail.com

🏡 yangxx0405.github.io

EDUCATION

University of California, Santa Barbara

Ph.D. student in Computer Science

- Advisor: Professor Eric Vigoda

Santa Barbara, CA, US

(expected) 09/2025 - 2030

Northeast Normal University

B.S. in Computer Science and Technology

- Advisor: Professor Zhiguo Fu

Changchun, China

09/2020 - 06/2024

EMPLOYMENT

The University of Hong Kong

Research Assistant hosted by Professor Weiming Feng

Hong Kong SAR, China

05/2025 - 07/2025

New York University Shanghai

Research Associate hosted by Professor Jie Xue

Shanghai, China

10/2024 - 01/2025

VISITING AND INTERNSHIP

The University of Hong Kong

Visitor hosted by Professor Weiming Feng

Hong Kong SAR, China

03/2025

Nanjing University

Visiting Student hosted by host by Professor Yitong Yin

Nanjing, China

04/2023

SELECTED AWARDS AND SCHOLARSHIPS

Presidential Scholarship

rank 1 in the major

Northeast Normal University

2022 & 2024

National Scholarship

top scholarship in mainland China (0.2% national-wide)

China

2021

RESEARCH ARTICLES

Authors are listed in alphabetical order.

[C] indicates conference publications, and [J] indicates journal publications.

[6] Learning CNF formulas from uniform random solutions in the local lemma regime

Weiming Feng, X. Yang, Yixiao Yu, Yiyao Zhang

Submitted

[5] **Simple and Efficient Algorithms for Approximating the Depth of Unit Balls**

Sujoy Bhore, Jie Xue, **X. Yang**, Jiumu Zhu

Submitted

[4] **Dynamic Maximum Depth of Boxes with Near-optimal Update Time**

Sujoy Bhore, Subhash Suri, Jie Xue, **X. Yang**, Jiumu Zhu

Submitted

[3] **Dynamic maximum depth of geometric objects**

Subhash Suri, Jie Xue, **X. Yang**, Jiumu Zhu

[C] 41st International Symposium on Computational Geometry (**SoCG 2025**)

- Invited to SoCG special issue (regretfully declined)

[2] **Spectral Independence Beyond Total Influence on Trees and Related Graphs**

Xiaoyu Chen, **X. Yang**, Yitong Yin, Xinyuan Zhang

[C] 2025 ACM-SIAM Symposium on Discrete Algorithms (**SODA 2025**)

[1] **Beyond windability: Approximability of the four-vertex model**

Tianyu Liu, **X. Yang**

[J] *Theoretical Computer Science*, Volume 995 (2024), Article 114491

TRANSLATIONS

All translations are in Simplified Chinese.

[1] **The Art of Computer Programming, Volumn 4B: Combinatorial Algorithms, Part 2**

《计算机程序设计艺术 卷4B：组合算法（二）》

Author: Donald E. Knuth

Translators: **X. Yang**, Guang Hu, Xihan Li, Fei Liu

Publisher: Posts & Telecommunications Press (ISBN: 978-7-115-66633-8)

TALKS

• **Dynamic Maximum Depth of Geometric Objects**

- The 41st International Symposium on Computational Geometry (SoCG 2025)

25/06/2025 @ Kanazawa, Ishikawa Prefecture, Japan

- The 16th Annual Meeting of Asian Association for Algorithms and Computation (AAAC 2025)

31/05/2025 @ The City University of Hong Kong, Hong Kong SAR, China

- **A Glimpse into the Theory World**

- Information Science Academic Forum (in Chinese)

11/04/2025 @ Northeast Normal University, Changchun, China

- **Approximability of the Four-Vertex Model**

- NYU Shanghai Theory Lunch

21/10/2024 @ New York University Shanghai, Shanghai, China

ACADEMIC SERVICE

- Conference Reviewing: SoCG (2025), WWW (2026)