

EDUCATION

University of Pennsylvania

Philadelphia, PA

Ph.D in Computer and Information Science

2024 - 2029 (expected)

Advised by Sanjeev Khanna and Erik Waingarten.

Graduate Coursework: Algorithms for Massive Data, Randomized Algorithms, Machine Learning Theory

Columbia University

New York, NY

B.A. in Computer Science, Mathematics

2020 - 2024

GPA: 4.06/4

<u>Selected CS Coursework:</u> Advanced Algorithms, Computational Complexity, Computational Learning Theory, Convex Optimization, Cryptography, Differential Privacy, Quantum Computing

Selected Math Coursework: Algebraic Geometry, Algebraic Number Theory, Analysis, Probability Theory

PUBLICATIONS

(authors ordered alphabetically by last name)

- 1. Karthik C. S., Henry Fleischmann, Kyrylo Karlov, **Ashwin Padaki**, Styopa Zharkov. Inapproximability of Maximum Diameter Clustering for Few Clusters. *Proceedings of the 2025 Annual ACM-SIAM Symposium on Discrete Algorithms (SODA)*. 2025
- 2. Josh Alman, Yunfeng Guan, **Ashwin Padaki**. Smaller Low-Depth Circuits for Kronecker Powers. Proceedings of the 2023 Annual ACM-SIAM Symposium on Discrete Algorithms (SODA). 2023

TALKS

1. Inapproximability of Maximum Diameter Clustering for Few Clusters, SODA 2025

SELECTED WORK EXPERIENCE

Teaching Assistant

Sep 2022 - Dec 2023

Columbia University

New York, NY

Cryptography (Fall 2023), Computational Complexity (Spring 2023), Real Analysis (Fall 2022).

Quantitative Trader Intern

Jun 2022 – Aug 2022

Optiver

Chicago, IL

• Developed, backtested, and implemented high-frequency trading strategies for stock options.

SERVICE

Mentor

Sep 2023 – Dec 2023

Columbia Undergraduate Learning Seminar in Theoretical Computer Science

New York, NY

Organized and taught a seminar on Boolean function analysis for undergraduate students.

ACHIEVEMENTS

National Science	Foundation	(NSF)	Graduate	Research Fello	53 7
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2024

Phi Beta Kappa Inductee

2024

Putnam Mathematical Competition, Top 500 Scorer

2022