

Anakin Dey

Curriculum Vitæ

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🌐 www.anakin.phd

Research Interests

Algebraic Combinatorics, Algebraic and Geometric Complexity Theory, Computational Algebra

Education

Fall 2024 — PhD Mathematics, The Ohio State University

Spring 2030

Fall 2020 — BSLAS Mathematics, University of Illinois Urbana-Champaign

Spring 2024 Minor in Computer Science

Graduation with Highest Distinction

Publications

2025 **Debordering Closure Results in Determinantal and Pfaffian Ideals**

Anakin Dey and Zeyu Guo

Innovations in Theoretical Computer Science 2026, [ECCC](#)

2025 **Optimizing a Model-Agnostic Measure of Graph Counterdeceptiveness via Reattachment**

Anakin Dey, Sam Ruggerio, Manav Vora, and Melkior Ornik

IEEE Cyber Awareness and Research Symposium 2025, [arXiv](#)

2024 **Classifying Primitive Solvable Permutation Groups of Rank 5 and 6**

Anakin Dey, Kolton O'Neal, Duc Van Khanh Tran, Camron Upshur, and Yong Yang

Journal of Group Theory, [DeGruyter](#)

2022 **Post-Disaster Repair Crew Assignment Optimization Using Minimum Latency**

Anakin Dey and Melkior Ornik

IEEE International Smart Cities Conference 2022, [IEEE](#)

Talks

2026 **Debordering Closure Results in Determinantal and Pfaffian Ideals**

Innovations in Theoretical Computer Science 2026

2026 **Polynomial Identity Testing**

OSU MGSA Short n' Sweet Seminar

2025 **The Affine Symmetric Group**

OSU Affine Grassmannian Seminar

2025 **What Is Algebraic Complexity Theory**

OSU What Is...? Seminar

2024 **Classifying Primitive Groups using Computer Algebra and Change Making**

China-US Group Theory Summit 2024

- 2023 **Classifying Primitive Groups using Computer Algebra and Change Making**
UIUC Department of Mathematics Undergraduate Friday Seminars
- 2023 **Classifying Primitive Solvable Permutation Groups of Rank 5 and 6**
China Three Gorges University Algebra and Combinatorics Seminar
- 2022 **Post-Disaster Repair Crew Assignment Optimization Using Minimum Latency**
IEEE International Smart Cities Conference 2022

Research Experience

- Spring 2024* **Undergraduate Research Assistant, [ICLUE](#)**
Under Prof. Alexander Yong, University of Illinois Urbana-Champaign
- Summer 2023* **Undergraduate Research Assistant, [REU in Algebra, Combinatorics, and Statistics](#)**
Under Prof. Yong Yang, Texas State University
- Fall 2021 —* **Undergraduate Research Assistant, [LEADCAT Lab](#)**
- Fall 2023* Under Prof. Melkior Ornik, University of Illinois Urbana-Champaign

Student Organizations

- Spring 2025 —* **Vice President, OSU [MGSA](#)**
Current Ohio State University Math Graduate Student Association
- Fall 2022 —* **Founder and President, ACM [SIGma](#)**
- Spring 2024* Special Interest Group in Math and Algorithms
- Fall 2021 —* **Admin, ACM [SIGPwny](#)**
- Spring 2024* Special Interest Group in Cybersecurity

Teaching Experience

- Fall 2025 —* **Graduate Teaching Associate, The Ohio State University**
- Current*
 - Math 1151 — Calculus I
(*Fall 2025*)
- Spring 2021 —* **Undergraduate Course Assistant, University of Illinois Urbana-Champaign**
- Spring 2024*
 - CS 225H — Honors Data Structures
(*Spring 2024*)
 - CS 374 — Introduction to Algorithms and Models of Computation
(*Spring 2022 — Fall 2022, Fall 2023*)
 - CS 173 — Discrete Structures
(*Spring 2021 — Spring 2024*)
 - CS 475 — Models of Computation
(*Spring 2023*)
 - CS 125 — Introduction to Computer Science
(*Spring 2021*)

Seminar Organization

- Spring 2025* **Commutative Algebra Reading Group**
- Spring 2025 —* **MGSA and Short n' Sweet Seminars**
Current

Professional Experience

- Summer 2022* **Software Engineering Intern, CME Group**
- Summer 2021* **Software Engineering Intern, SiteIQ**

Last Edited on 2026-01-13 at 09:09. See [anakin.phd/cv](#) for the most up-to-date version.