Drew Melman-Rogers

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EDUCATION:

- BA in Mathematics, University of Chicago 2019-2023
 - o GPA: 3.71/4.0
- MS in Computer Science, University of Chicago 2023-December 2024

WORK EXPERIENCE:

- Distributed Computing Research Intern, NASA Langley Research Center June 2024–present
 - Joined a team researching and implementing applications of algebraic topology and modal logic to distributed software for use in mission-critical and life-critical systems
- Quantitative Researcher, Bourbaki Capital October 2023–June 2024
 - Researched models in academic literature on optimal automated market making and led their implementation using Python code, using tools from higher mathematics to improve effectiveness and efficiency
- Mentor, University of Chicago Research Experience for Undergraduates June 2023–September 2023
 - Designed a curriculum and taught an undergraduate math major the fundamentals of commutative algebra and algebraic geometry, and guided that student through the process of producing an expository research paper

RESEARCH EXPERIENCE AND PUBLICATIONS:

- University of Chicago Research Experience for Undergraduates Summer 2022
 - Hypercohomology and the Algebraic de Rham's Theorem (under revision)
- University of Chicago Research Experience for Undergraduates Summer 2021
 - Luna's Étale Slice Theorem

AWARDS AND RECOGNITIONS:

- University of Chicago Dean's List, 2021-2022
- United States National Chemistry Olympiad, Washington D.C. Representative, 2017-2018
- Chess Team, DCSAA State Champions, 2017-2018

TECHNICAL SKILLS

 Python, Basic Machine Learning, Data Structures and Algorithms, Computer Systems, Software Engineering, Mathematics (Linear Algebra, Classical and Measure-theoretic Probability, Real and Complex Analysis, Abstract Algebra, Ordinary, Partial, and Stochastic Differential Equations, Algebraic Topology, Algebraic and Arithmetic Geometry, Number Theory, Graph Theory, Combinatorics, Equivariant Theory, Sheaf Theory, Optimization)

INTERESTS:

• Chinese ceramics and teaware, continental philosophy, powerlifting, memorization challenges, rock climbing, translating Hittite cuneiform