

Samuel King

PHD STUDENT · GEORGETOWN UNIVERSITY

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Education

Georgetown University

PHD, COMPUTER SCIENCE

- Advisor: Sasha Golovnev
- Research Interests: Computational Complexity, Discrete Mathematics, Algorithms

Washington D.C.

Fall 2021 - present

University of Rochester

HONORS BS, MATHEMATICS

- Minor in Computer Science
- Thesis: Sampling Young Tableaux and Contingency Tables
- Thesis Advisors: Daniel Štefankovič and Sevak Mkrtchyan
- Take Five Scholar: The Role of Music in Video Games and Film
- Magna Cum Laude, GPA: 3.96

Rochester, NY

Fall 2016 - Spring 2021

Research Experience

University of Maryland

REU - COMBINATORICS AND ALGORITHMS FOR REAL PROBLEMS (REU-CAAR)

- Topic: Algorithms for routing qubits via reversals
- Advisors: Andrew Childs and Alexey Gorshkov

College Park, MD

Summer 2020

University of Rochester

GRAD STEM FOR ALL

- Topic: Polynomial Methods in Combinatorics, Geometry, and Integer Partitions
- Advisor: Alex Iosevich

Rochester, NY

Summer 2019

Carnegie Mellon University

SUMMER UNDERGRADUATE APPLIED MATHEMATICS INSTITUTE (SUAMI)

- Topic: Anti-Ramsey theory for colorings of $\mathbb{Z}/n\mathbb{Z}$
- Advisor: Michael Young

Pittsburgh, PA

Summer 2018

Publications

- [1] Erin Bevilacqua, Samuel King, Jürgen Krietschgau, Michael Tait, Suzannah Tebon, and Michael Young. Rainbow numbers for $x_1 + x_2 = kx_3$ in \mathbb{Z}_n . *Integers: Electronic Journal of Combinatorial Number Theory*, 20(A50):A50, 2020.
- [2] Aniruddha Bapat, Andrew M. Childs, Alexey V. Gorshkov, Samuel King, Eddie Schoute, and Hrishee Shastri. Quantum routing with fast reversals. *Quantum*, 5, 533, 2021.

Honors and Awards

- 2020 **Arthur S. Gale Memorial Prize**, University of Rochester Mathematics Department
- 2019 **Take Five Scholarship**, University of Rochester
- Deans' Award for Symposium Presentation**, University of Rochester
- Joint Mathematics Meetings 2019 Outstanding Poster Distinction**, JMM 2019
- 2016 **Wilder Trustee Scholarship**, University of Rochester

Presentations_____

Samuel King. 2019. Rainbow numbers for $x_1 + x_2 = kx_3$ in \mathbb{Z}_n . Oral Presentation: University of Rochester Undergraduate Research Exposition, Rochester, NY.

Erin Bevilacqua, Samuel King, Suzannah Tebon. 2019. Rainbow numbers for $x_1 + x_2 = kx_3$ in \mathbb{Z}_n . Poster: Joint Mathematics Meetings 2019, Baltimore, MD.

Teaching Experience_____

Summer 2023	New Horizons in Theoretical Computer Science , Teaching Assistant	<i>TTIC (Virtual)</i>
Fall 2020	Graduate Algebra I , Teaching Assistant & Lecturer	<i>U of Rochester</i>
Fall 2017 - Spring 2020	Honors Calculus I & II (Freshman Real Analysis) , Teaching Assistant & Workshop Leader	<i>U of Rochester</i>

Professional Development & Memberships_____

DIMACS Workshop on Lower Bounds and Frontiers in Data Structure, Rutgers University, August 2022

Phi Beta Kappa Honor Society