MICHAEL DOERFLER

PhD Student Emory University

Rollins School of Public Health, Department of Biostatistics and Bioinformatics

EDUCATION

PhD Student in Biostatistics

Department of Biostatistics and Bioinformatics, Rollins School of Public Health Emory University

Coursework: Bayesian and Empirical Bayes Methods, Statistical Inference I, Probability Theory I, Applied Machine Learning, Applied Linear Models, Biostatistical Methods, Observational Studies, Epidemiologic Methods I.

B.S. in Mathematics

University of Montevallo

4.0 GPA, Summa Cum Laude

Coursework: Real Analysis, Complex Analysis, Topology, Abstract Algebra, Mathematical Statistics, Numerical Analysis, Graph Theory, Linear Algebra, Differential Equations, Constitutional Law, Environmental Ethics/Policy.

RESEARCH EXPERIENCE

Tilings and Visible Tilings of the Hypercube

- · Undergraduate Research at University of Montevallo
- · Faculty Advisor: Dr. Benton Tyler
- We developed a lower bound for the number of possible visible tilings of the square. Presented our research at 2023 Troy MathFest conference.

Economic Scarcity and Prejudice

- · Undergraduate Research at University of Montevallo
- · Faculty Advisor: Dr. Andrea Eckelman
- Explored relationship between economic scarcity and prejudice in America. Conducted literature review. Developed linear regression model. Presented findings at the University of Montevallo's 2023 Undergraduate Research Day event.

AWARDS, HONORS, AND SCHOLARSHIPS

- 2024 First Year Theory Qualifying Exam Top Performer, Emory University.
- 2023 Marlene N. Cole and Raymond P. Bain scholarship, Emory University.
- 2022 Mathematics Senior Elite, University of Montevallo.
- Joseph M. Cardone Mathematics Scholarship, University of Montevallo.
- President's Scholarship Award, University of Montevallo.

PRESENTATIONS

Oral Presentations

- 1. Tilings and Visible Tilings. Troy MathFest, Troy University. April 15th 2023.
- 2. Ramsey Theory. Senior Presentation, University of Montevallo. April 14th 2023.

Poster Presentations

1. Economic Scarcity and Prejudice. University of Montevallo Undergraduate Research Day Event, May 15th 2023.

August 2023-Present

August 2020-May 2023

January 2023 - May 2023

August 2022 - May 2023

TEACHING EXPERIENCE

Academic Peer Tutor

- Peer Tutor at University of Montevallo.
- · Tutored students in calculus and physics.

VOLUNTEER EXPERIENCE

Youth Soccer Assistant Coach

• Was a volunteer assistant coach for youth city soccer teams in central Alabama.

COMPETENCIES

Programming Languages: R, SAS, Python.

Tools: LATEX, Maple.

2017-2022