

KYLE MONETTE

Ph.D. Student
Department of Mathematics
University of Rhode Island
Kingston, RI

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Enthusiastic and dedicated graduate student with a strong academic background and passion for education and research. Skilled in developing instructional materials and facilitating engaging learning environments. Proven ability to quickly learn and produce results in both research and industry settings. Adept at managing multiple responsibilities while maintaining organization and schedules. Committed to detail, comprehension, and excellence in my work.

EDUCATION

Ph.D. Applied Mathematics, 2024–2027, University of Rhode Island, Kingston, RI

Advisors: Drs. James Baglama and Vasilije Perovic

M.S. Mathematics, 2024, University of Rhode Island, Kingston, RI

B.S. Mathematics, 2022, Clarkson University, Potsdam, NY

With distinction

WORK EXPERIENCE

Graduate Teaching Assistant

August 2022 - present

University of Rhode Island, Department of Mathematics

Served as primary instructor for undergraduate mathematics courses. Prepared course materials and delivered lectures. Assisted students by hosting office hours and tutoring sessions. Graded assignments and exams, providing constructive feedback to enhance their learning.

Technical Writer

March 2024 - January 2025

Edfinity

Authored solutions in LaTeX and PG (WebWork) for an online homework software company (contract basis). Communicated with company leads and university faculty. Succeeded in meeting project deadlines and generating solutions with accuracy and fluency.

Teaching Assistant

February 2022 - May 2022

Williams College, Department of Mathematics

Hosted office hours and graded assignments during one semester for Computational Linear Algebra. Actively engaged with students to support their learning and understanding of complex mathematical concepts. Strengthened my programming ability in R and wrote solutions using markdown.

Undergraduate Teaching Assistant

August 2020 - December 2021

Clarkson University, Department of Mathematics

Led recitations and graded homework for advanced mathematics courses. Provided additional support to students through office hours and feedback on assignments.

COURSES TAUGHT

University of Rhode Island

- MTH141 Calculus I: Spring 2025
- MTH131 Applied Calculus: Fall 2024 (45 students)
- MTH103 Applied Precalculus: Fall 2022 (45 students), Spring 2023 (42 students), Fall 2023 (45 students), Spring 2024 (40 students), Fall 2024 (45 students)

SERVICE AND ACTIVITIES

Supplemental Video Channel for MTH 103

Summer 2023 - ongoing

Created a YouTube channel (@mth103uri) containing worksheet videos and walkthroughs to practice exams. Currently the channel hosts 52 videos with a combined 11,000 views.

Transitioning Homework Software

Summer 2023

Migrated homework assignments for two undergraduate courses from WebWork to Edfinity. Assisted faculty in configuring the new software and created instructions for students.

Helpdesk Assistance

Spring 2023

Served as administrator on WebWork courses. Assisted students and faculty with technical tasks such as changing assignment data, resetting passwords, and general site maintenance.

OTHER PROJECTS

- Website: Configuring my website, kylemonette.github.io. Implemented LaTeX support for blog posts.
- VS-Code LaTeX: Implemented an offline LaTeX editor on a Macbook utilizing custom snippet commands written in Python and Ruby. Increased speed, and quality, of LaTeX documents dramatically as a result.
- Spotify Data: Created R-Markdown programs to illustrate and summarize my streaming data from Spotify. Gained experience in the Tidyverse package and data visualization.
- Custom LaTeX Styles: Authored .sty files for course notes and assignments. Implemented packages such as tcolorbox and created environments for definitions, theorems, etc.

PRESENTATIONS

Gaussian Quadrature and Tridiagonal Matrices (slides)

University of Rhode Island, Applied Mathematics Seminar

December 2024

GMRES – An Iterative Method for Solving Linear Systems (slides)

University of Rhode Island, Applied Mathematics Seminar

April 2024

Concatenation of Matrix Products (slides)

Mathematics Conference and Competition of Northern New York (MCCNNY)

March 2024

Gaussian Quadrature and Tridiagonal Matrices (slides)

University of Rhode Island, MTH472 Numerical Linear Algebra

December 2023

Secret Sharing Schemes (slides)

Clarkson University, CS556 Cryptography

May 2022

The Double Pendulum: Lagrangian Mechanics and Chaos (slides)

Mathematics Conference and Competition of Northern New York (MCCNNY)

March 2022

AWARDS AND HONORS

R. Gerald Bradshaw Award for Mathematics

2021

President's List, Clarkson University

2021, 2020, 2018

Dean's List, Clarkson University

2020, 2019

TECHNICAL SKILLS

Maple, MATLAB, Python, R, Mathematica, WeBWorK, Edfinity, Moodle, Canvas, Brightspace,
WordPress, \LaTeX , Microsoft Office, Mac-OS

PROFESSIONAL AFFILIATIONS

American Mathematical Society (AMS)

Mathematical Association of America (MAA)

Society for Industrial and Applied Mathematics (SIAM)