

# 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 passions for education and research. Skilled in developing instructional materials and facilitating engaging learning environments. Proven ability to quickly learn and produce results in research and industry settings. Adept at managing multiple responsibilities while maintaining organization and schedules. Committed to detail, comprehension, and excellence.

## EDUCATION

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**Ph.D. Applied Mathematics**   2024 – 2027 (expected)   University of Rhode Island   Kingston RI  
Advisors: Drs. James Baglama and Vasilije Perovic  
Research: Numerical Linear Algebra (Krylov methods for linear systems)

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

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

## WORK EXPERIENCE

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**Graduate Teaching Assistant**   University of Rhode Island   **August 2022 - present**

Served as primary instructor for undergraduate mathematics courses with 45 students each. Prepared course materials and lectured. Assisted students by hosting office hours and tutoring sessions. Collaborated with faculty and administration. Graded assignments and exams, providing constructive feedback to enhance their learning. Developed new supplemental material like worksheets and videos to increase student engagement. Received above average student evaluation scores (average 4.24/5).

**Technical Writer**   Edfinity   **March 2024 - January 2025**

Authored 300 solutions and 400 step-by-step problem guides in LaTeX and PG (WebWork) for an online homework software on a contract basis. Communicated with company leads and university faculty. Succeeded in meeting project deadlines and generating solutions with accuracy and fluency.

**Teaching Assistant**   Williams College   **February 2022 - May 2022**

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**   Clarkson University   **August 2020 - December 2021**

Led recitations and graded homework for advanced mathematics courses. Provided additional support to students through office hours and feedback. Assisted faculty in the return to campus after COVID.

## COURSES TAUGHT

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### University of Rhode Island:

MTH 141 Calculus I: Spring 2025

MTH 131 Applied Calculus: Fall 2024

MTH 103 Applied Precalculus: Fall 2022, Spring 2023, Fall 2023, Spring 2024, Fall 2024

## SERVICE AND ACTIVITIES

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### MTH 103 Course Assistance

Summer 2023 - ongoing

Created and maintain a YouTube channel @mth103uri with solutions to worksheets and practice exams. The channel is accessed by 1,000 students taking MTH 103 during the academic year, and hosts 57 videos with a combined 16,000 views and 40 subscribers. Assisted in the writing of exams and course logistics. Collaborated with faculty on modifications to the curriculum and methodology.

### Transitioning Homework Software

Summer 2023

Migrated homework assignments from WebWork to Edfinity. Assisted faculty in configuring the new software and created instructions for students. Saw an increase in student engagement and performance.

### Graduate Student Mentor

Summer 2023 - ongoing

Served as a mentor to incoming graduate students in the department. Assisted new students settle in to the program. Provided advice on course logistics and creating their course webpage. Created a Slack channel to increase collaboration and engagement, fostering a more cohesive graduate student community.

## PERSONAL PROJECTS

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- Website: Configured my website using Jekyll. Installed LaTeX support for blog posts.
- Spotify Data: Wrote R programs to illustrate and summarize my streaming data from Spotify. Gained experienced 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.

## SELECTED PRESENTATIONS

*Complete List*

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*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

## AWARDS AND HONORS

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R. Gerald Bradshaw Award (For academic excellence in mathematics)

2021

President's List and Dean's List, Clarkson University

2018 – 2021

## TECHNICAL SKILLS AND PERSONAL STRENGTHS

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### Technical Strengths

Maple, MATLAB, Mathematica, R, Python

LaTeX, Microsoft Suite, WordPress

Windows, Mac, Linux

### Personal Strengths

Linear Algebra, Numerical Analysis, Optimization

Technical Writing, Public Speaking, Communication

Efficient, Versatile, Inquisitive