Kyle Monette

Ph.D. Student
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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

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

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 - July 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

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

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

- 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*

Computing the Spectral Density of a Matrix (slides)

University of Rhode Island, Applied Mathematics Seminar   March 2025

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

Awards and Honors

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

Technical Strengths	Personal Strengths
Maple, MATLAB, Mathematica, R, Python	Linear Algebra, Numerical Analysis, Optimization
LaTeX, Microsoft Suite, WordPress	Technical Writing, Public Speaking, Communication
Windows, Mac, Linux	Efficient, Versatile, Inquisitive