

KYLE MONETTE

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

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Enthusiastic and dedicated PhD candidate with a strong academic background and passion for education and research. Proven excellence in developing course materials and facilitating engaging learning environments. Technologically proficient with experience in multiple languages and interfaces. 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

Research: Numerical Linear Algebra, with focus on large scale computations – linear systems and eigenvalue problems; Applications in scientific computing.

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

WORK EXPERIENCE

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

Served as primary instructor for undergraduate mathematics courses (usually coordinated) with 45 students. Prepared lecture notes and assignments for each course. Provided immediate and constructive feedback on assignments. Developed new supplemental worksheets and videos. Consistently had very positive student evaluations and high overall instructor rating (average 4.3/5).

Courses Taught:	MTH 215 Linear Algebra (★)	MTH 141 Calculus I (2 times)
	MTH 131 Applied Calculus	MTH 103 Applied Precalculus (5 times)
	(★) – non-coordinated course	

Content Writer Edfinity **March 2024 – present**

Authored over 100 problems and 1,000 solutions in PG (WebWork language) for an online math homework software company. Communicated with company leads and educators. Succeeded in meeting project deadlines and writing with accuracy, fluency, and attention to detail.

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-19.

RELEVANT GRADUATE COURSEWORK

Numerical Linear Algebra (two courses)
Numerical Analysis
Optimization Methods
Mathematics for Data Science

Linear Algebra
Numerical Partial Differential Equations
Functional Analysis (two courses: theory, applications)
Linear Control Systems

SERVICE AND ACTIVITIES

Math Level-Up Bootcamp

Summer 2025

Lead mini-lectures and recitations in precalculus for two weeks to prepare incoming freshman for calculus. Students demonstrated strong improvement according to pre-tests and post-tests scores.

Calc-Bowl Problem Creation

Spring 2024 – ongoing

Volunteered for a yearly outreach event for high school students to compete in solving calculus problems. Contributed questions to be used and assisted with logistics during the event.

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 20,000 views and 50 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.

SEMINAR PRESENTATIONS

Computing the Spectral Density of a Matrix

University of Rhode Island, Applied Mathematics Seminar

March 2025

Gaussian Quadrature and Tridiagonal Matrices

University of Rhode Island, Applied Mathematics Seminar

December 2024

GMRES – An Iterative Method for Solving Linear Systems

University of Rhode Island, Applied Mathematics Seminar

April 2024

Matrix Products Coinciding with Concatenation

Mathematics Conference and Competition of Northern New York (MCCNNY)

March 2024

The Double Pendulum: Lagrangian Mechanics and Chaos

Mathematics Conference and Competition of Northern New York (MCCNNY)

March 2022

AWARDS AND HONORS

R. Gerald Bradshaw Award (For academic excellence in mathematics)
President's List and Dean's List, Clarkson University

2021
2018 – 2021

TECHNICAL AND PERSONAL STRENGTHS

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

PROFESSIONAL AFFILIATIONS

American Mathematical Society (AMS)
Mathematical Association of America (MAA)
Society for Industrial and Applied Mathematics (SIAM)