# Kyle Monette

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# **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

## ACADEMIC EXPERIENCE

### Graduate Teaching Assistant

August 2022 - present

University of Rhode Island, Department of Mathematics

## Teaching Assistant

February 2022 - May 2022

Williams College, Department of Mathematics

## Undergraduate Teaching Assistant

August 2020 - December 2021

Clarkson University, Department of Mathematics

# Courses Taught

#### University of Rhode Island:

Served as primary instructor for the following courses. Responsibilities included lecturing, grading, and assessment design.

- 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)

## Additional Course Involvement:

- MTH101 Intermediate Algebra recitations
  - Fall 2022 (15 students)

- Spring 2023 (15 students)

# Williams College:

Hosted office hours and graded assignments during the Spring 2022 semester for MATH307 Computational Linear Algebra.

## Clarkson University:

Lead recitations and graded homework for the following courses.

- MA231 Calculus III
  - Fall 2020 (59 students)
  - Fall 2021 (37 students)
- MA232 Ordinary Differential Equations
  - Spring 2021 (23 students)
  - Fall 2021 (24 students)

## OTHER EXPERIENCE

### Solution Writer, Edfinity

March 2024 - December 2024

Wrote solutions in LaTeX and PG (WebWork language) for an online homework software company. Primary focus included problems in Calculus I, II, and III.

## 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, and assisted faculty in creating supplementary assignments, videos, and software instructions.

### Helpdesk Assistance

Spring 2023

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

## 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 President's List, Clarkson University Dean's List, Clarkson University 2021 2021, 2020, 2018

2020, 2019

# TECHNICAL SKILLS

Maple, MATLAB, 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)