Leonardo Pinheiro

EDUCATION

◊ Master of Data Science, University of Rhode Island — expected summer 2025

◊ Ph.D., Mathematics, Bowling Green State University — 2014

◊ M.SC., Pure Mathematics, Bowling Green State University — 2009

◊ B.SC., Mathematics, Universidade Federal do Rio de Janeiro — 2002

ACADEMIC POSITIONS

◊ Associate Professor with Tenure, Rhode Island College — July 2019 - present

◊ Assistant Professor, Rhode Island College — July 2014 – July 2019

COURSES TAUGHT AT RIC

	Course	Term
◊	Math 552 - Topics: Introduction to Data Science	Su21
◊	Math 550 - Topics: Mathematical Modeling	Su16, Su20
◊	Math 553 - Topics: Functional Analysis	Fa20
◊	Math 550 - Topics: Convex Optimization	Fa24
◊	Math 553 – Topics: Advanced Linear Algebra	Sp22
◊	Math 528 - Topology	Sp21
◊	Math 512 - Foundations of Higher Analysis	Fa19
◊	Data 460 - Seminar in Data Science	Sp24
◊	Math 461W - Seminar in Mathematics	Sp23
◊	Math 417 - Introduction to Numerical Analysis	Sp23
◊	Math 345 - Linear Models for Data Science	Sp22
◊	Data 345 - Applied Linear Algebra for Statistical Learning	Sp23, Fa24

◊	Math 314 - Calculus 3	Fa17, Sp20
◊	Math 315 - Linear Algebra	Fa15, Fa16, Fa20, Fa21
◊	Math 213 - Calculus 2	Fa17, Fa22
◊	Math 240 – Statistical Methods I	Su24
◊	Math 220 – Formalizing Mathematical Thought	Su18
◊	Math 248 - Business Statistics I	Fa22, Sp23, Sp24(2), Fa24
◊	Math 177 - Quantitative Business Analysis I	Fa15, Sp16, Sp18, Fa18 , Sp20,Fa22
◊	Math 144 Math for Elementary School Teachers II	Fa16, Sp20, Fa20
◊	Math 139 – Math, Data, and the Contemporary Citizen	Fa14(2), Fa17(2), Sp18(2), Fa18(2), Su19, Fa19(2), Su21, Fa21(2), Sp22, Su22, Su24
◊	Math 050/150 – Intermediate Algebra with Corequisites	Sp21
◊	Math 120 - Intermediate Algebra	Su21
◊	Math 010 - Basics Math Competency	Sp15, Sp16, Sp17, Su17(2), Su18(2), Fa18, Su19, Sp20, Su20, Sp23, Su22(2), Sp24(2)
◊	CSCI 141 - Applications of Artificial Intelligence	Fa24
◊	Math 212 - Calculus 1	Fa14, Sp19
◊	Math 209 - Precalculus Mathematics	Sp15, Su15, Fa15, Sp16, Fa16, Sp17, Sp19, Fa19
◊	Math 210 - Trigonometry	Sp16
◊	Math 300 – Bridge to Advanced Mathematics	Sp16, Sp17, Sp19
◊	Math 436 - Discrete Mathematics	Sp15, Su16
◊	Math 552 - Topics Mathematical Finance	Fa16

PUBLICATIONS

Peer-reviewed

◊ L. Pinheiro, N. Baxter, U. Perera "Empirical error analysis in demographic variable approximation for non-standard geographical hierarchies (preprint)

◊ J. Burke, M. Burke, L. Pinheiro, & C. Richer "Methods for counting the intersections of slopes in the flat torus." Transactions on Combinatorics, (), -. doi:10.22108/toc.2023.135546 (2023)
(Authors in Alphabetical Order)

◊ J. Burke and L.Pinheiro, "Topologically mixing extensions of endomorphisms on Polish groups", Appl. Gen. Topol., Vol. 23, no. 1, pp. 179–187(2022)
(Authors in Alphabetical Order)

◊ K.C. Chan, L. Pinheiro, "Simultaneous chaotic extensions for general operators on a Hilbert subspace", Journal of Mathematical Analysis and Applications, Vol. 448, Issue 2, pp. 937-967 (2017).
(Authors in Alphabetical Order)

◊ K.C. Chan, G.Kadel, L.Pinheiro, "Chaotic differentiation operators on harmonic functions and simple connectivity", Revista de la Real Academia de Ciencias Exactas, Fisicas y Naturales: Matematicas, Serie A; Milan Vol. 109, Issue 2, pp. 385-393 (2015)
(Authors in Alphabetical Order)

Data Science Case Study

◊ J. Lozada, L. Pinheiro. C.Thawley "Predicting Charging Patterns of Electric Vehicles (2023)" (pre-print)

Textbook Content Contributions

◊ Pathways to College, D. Franklin Wright, Hawkes Learning. (2022)
Contributed content includes exercises, chapter introductions, and chapter projects.

◊ Living Life Mathematically, 2ed, Danley and Hall, Hawkes Learning. (2022)
Contributed content for chapter projects.

◊ Precalculus with Integrated Review, Paul Sisson, Hawkes Learning. (2021)
Contributed content includes exercises, chapter introductions, and chapter projects.

SERVICE

Service to the College

◊ Program Review Committee	2024
◊ Structural Issues Task Force	2024

◊	Chair of College's Graduate Curriculum	2020 – 2023
◊	Chair or RIC Council's Elections Committee	2021,2022,2023
◊	Search Committee for Assistant Vice President for Adult & Online Education	2021
◊	Chair of Elections Committee	2017-2023
◊	Council of Rhode Island College	2017-2019,2020
◊	Elections Committee Chair	2017-2022
◊	Hiring Committee for AVP of adults and online education	◊ 2022
◊	Advisory Committee on Technology (ATAC)	2016-2017
◊	OBOM Student Conference	2017

Service to the Department

◊	Program Director for the MA in Mathematical Studies	2022-present
◊	Chair of the Department's Graduate Committee	2022-present
◊	Member of the Department's Committee on Course Curriculum	2019- 2020
◊	Member Graduate Committee	2017-2020
◊	Chair of the Committee on Committee	2019-2020
◊	Internal Search Committee for Dean of Graduate Studies	2021
◊	Elected member of the Department Advisory Committee	2016, 2020-2022
◊	Admissions Liaison	2018-2021, 2023-2024
◊	Pi Mu Epsilon Advisor.	2015-2019
◊	Hiring Committee – Tenure Track Position in Mathematics	Spring 2017

Service to the Community

◊	Judge SIMIODE Challenge Using Differential Equations Modeling	2022, 2023
◊	Question Writer for National Quiz Bowl	2022
◊	NExT Session coordinator – Joint Mathematical Meetings	Seattle, 2017
◊	Analysis Session Organizer Joint Mathematical Meetings	Seattle, 2017

◊	Undergraduate Research Judge JMM	Seattle, 2017
◊	Undergraduate Research Judge – JMM	Baltimore, 2016
◊	Rhode Island Science Fair Judge	2014

INVITED TALKS

◊	Rhode Island College PME Beta Chapter Induction Ceremony. IA fish out of water: a math professor playing data scientist.	Spring 2024
◊	Main invited speaker for the 2021 PME Undergraduate Research Conference at St. Norbert College, De Pere, WI. I presented two talks: Are you sure? Mathematical thinking in everyday life and Mathematical Monsters.	Fall 2021
◊	University of New Haven – Mathematics and Physics Seminar An Introduction to Linear Dynamics	Fall 2017
◊	Clarion University of Pennsylvania – Mathematics Colloquium Mathematical Monsters: from the counterintuitive to the bizarre	Fall 2017
◊	Central Connecticut University – Mathematics Colloquium	Fall 2016
◊	An introduction to the dynamics of Linear Operators	

CONTRIBUTED TALKS

◊	Joint Mathematical Meetings 2017 MAA Contributed Talks in Analysis Chaotic Differentiation Operators and Simple Connectivity	Spring 2017, Atlanta, GA
◊	Joint Mathematical Meetings 2016 MAA Contributed Talks in Analysis Simultaneous Extensions of Chaotic Operators	Spring 2016, Seattle, WA

GRANTS

◊ SUMA Grant, Mathematical Association of America (Co-PI) 2019
The Mathematical Association of America sponsored the afterschool mathematics program Beyond the Curriculum at Nathaniel Greene Middle School in Providence. We met with 8th graders for 7 weeks and worked on hands-on activities designed to stimulate their interest in Mathematics and STEM careers.

◊ Mini Grant Fall 2016
Office of Sponsored Programs, Rhode Island College

◊ New Experiences in Teaching Fellowship Spring 2015
Project NExT Mathematical Association of America (Spring 2015)

◊ Professional Development Fund Fall 2014
Office of Research and Grant Administration, Rhode Island College

HONORS AND AWARDS

◊ Exceptional Performance Award, Rhode Island College 2020

This award is given annually to faculty at the college whose performance is deemed exceptional during the annual performance evaluation.

PROFESSIONAL DEVELOPMENT

◊ Courses Taken at the University of Rhode Island
  o DSP 567 - Database, Cloud, Big Data Fall 2024
  o DSP 569 - Data Science Applications in Biology Fall 2024
  o DSP 565 - Computational Statistics Summer 2024
  o DSP 562 - Data Analytic & Visualization Spring 2024
  o DSP 563 - Applied Mathematics in Data Science Spring 2024
  o DSP 555 - Multivariate Statistical Learning for Data Science Fall 2023
  o DSP 556 - Machine Learning for Data Science Fall 2023

◊ Rhode Island College Community Development Day (link) August 19, 2024
I participated in two breakout sessions: A.I. Basics led by, E. Patrick Rashleigh from Brown University, and What It Takes to Be Data-Driven led by Sara Phillips from RIC .

◊ Faculty of Arts and Science Retreat   January 10, 2024
I attended the sessions Experiential Learning and Fostering
Undergraduate Research and Building on Our Strengths
Interdisciplinarity and Fostering Double Majors/Minors

◊ Project NExT Workshops   Summer 2015, Spring 2016, Summer
Mathematical Association of America   2016

◊ Writing in the Discipline Workshop   Spring 2016
Rhode Island College

CONFERENCES ATTENDED

◊ Providence Business News Summit   Providence, Fall 2024
Cybersecurity and AI

◊ 2018 New England IBL   Fall 2018, Westfield State University, Westfield, MA
Conference

◊ 2018 Joint Mathematics Meetings   Spring 2018, San Diego, CA

◊ 2017 Joint Mathematics Meetings   Spring 2017, Atlanta, GA

◊ 2016 MAA Math Fest   Summer 2016, Columbus, OH

◊ 2015 Joint Mathematics Meeting   Spring 2015, San Antonio, TX

◊ 2015 MAA Math Fest   Summer 2015, Washington, DC

◊ 2014 North East MAA   Fall 2014, Southern Connecticut State
◊ Fall Sectional Meeting   University, New Haven, CT