ROHIN W. GILMAN

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EDUCATION

2007(1101)	
Ph.D. in Applied Mathematics University of Washington, Seattle, WA	June 2027 (Expected)
M.S. in Applied Mathematics University of Washington, Seattle, WA	June 2024
B.S. in Mathematics and B.S. in Computer Science Louisiana State University, Baton Rouge, LA	May 2022
EMPLOYMENT	
Graduate Teaching Assistant University of Washington, Department of Applied Mathematics	September 2022 - Present
Graduate Student Instructor University of Washington, Department of Applied Mathematics	June 2024 - August 2024
Supplemental Instruction Observation Leader Louisiana State University, Center for Academic Success	January 2022 - May 2022
Supplemental Instruction Peer Mentor Louisiana State University, Center for Academic Success	May 2020 - December 2021
Supplemental Instruction Leader Louisiana State University, Center for Academic Success	August 2019 - May 2020
Undergraduate Research Assistant Louisiana State University, Department of Mathematics	August 2018 - May 2021
HONORS AND AWARDS	
University Medal Louisiana State University	May 2022
Astronaut Scholarship Astronaut Scholarship Foundation	June 2021
Goldwater Scholarship Barry Goldwater Scholarship & Excellence in Education Foundation	March 2021
Pasquale Porcelli Undergraduate Scholarship Louisiana State University Department of Mathematics	March 2021
Peg and Tom Madden Undergraduate Research Fellowship Louisiana State University Department of Mathematics	May 2020
Demarcus D. Smith Scholarship Louisiana State University Department of Mathematics	April 2019
Demarcus D. Smith Scholarship Louisiana State University Department of Mathematics	December 2018

RESEARCH

Spatial Structure in Colorectal Cancer Evolution

June 2023 - Present

Advisor: Ivana Bozic, UW Department of Applid Mathematics

Simulated colorectal cancer evolution model including spatial information for individual cells and analyzed simulated data to study early development of colorectal cancer.

Modeling DNA Packing Using Elastic Rods

March 2021 - January 2022

Advisor: Shawn Walker, LSU Department of Mathematics

Modeled and simulated elastic curves under extreme confinement using differential equations, optimization, and numerical analysis.

University of Chicago Mathematics REU: Bond Percolation

June 2020 - August 2020

Advisors: Peter Morfe, Peter May, University of Chicago Department of Mathematics

Wrote a survey paper about bond percolation on the integer lattice, a simplified model for the potential for water to diffuse in a porous material, that covered the subcritical phase, supercritical phase, physically motivated conjectures about the critical point, and rigorous results that are known for critical percolation on a binary tree.

Lie-Trotter Type Product Formulas for Nonlinear ODEs

August 2018 - August 2021

Advisor: Frank Neubrander, LSU Department of Mathematics

Demonstrated how Koopman's global linearization can be used to extend product formulas to approximate solutions to non-linear differential equations and computed the rate of convergence of these approximations.

Presented: Apr. 9, 2019 at the LSU Discover Day (Poster); Baton Rouge, LA

Presented: Oct. 19, 2019 at the TX-LA Undergraduate Math Conference (Oral, Poster); College Station, TX

Presented: Apr. 28, 2020 at the LSU Discover Day (Online); Baton Rouge, LA

Presented: Aug. 14, 2021 at the Astronaut Scholar Technical Conference (Oral); Orlando, FL

TEACHING

AMATH 351 - Introduction to Differential Equations and Applications	Summer 2024
SERVICE	
Diversity, Equity, Inclusion, Accessibility, and Justice (DEIAJ) Committee University of Washington, Department of Applied Mathematics	March 2023 - Present
Writing and Critical Thinking Instructor with Minds Matter Seattle	August 2023 - May 2024
Research Mentor with Baton Rouge Youth Coalition	August 2021 - May 2022
Undergraduate Research Ambassador Louisiana State University, Discover Undergraduate Research	January 2019 - May 2022
Volunteer Instructor with Louisiana Math Circle	August 2018 - April 2019
MEMBERSHIPS	
American Mathematical Society (AMS)	January 2024 - Present
Society of Industrial and Applied Mathematics (SIAM)	January 2023 - Present