

MATT VARKONY

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📍Rosenstiel School of Earth, Marine, and Atmospheric Science: Key Biscayne, Florida

EDUCATION

University of Miami, Dept. of Environmental Science and Policy

PhD in Environmental Economics (GPA: 3.9/4)

GRE: 163Q, 157V, 5W

- Graduate Student Coastal and Ocean Grant (\$25,000)
- Gulf Research Science Policy Fellowship (\$65,000)

Miami, FL

Expected 2024

University of Miami

Masters in Natural Hazards Analysis (GPA - 3.9/4)

Bachelor of Science(s): Mathematics and Economics (GPA - 3.4/4)

Miami, FL

2016 - 2018

2012 - 2016

WORK AND LEADERSHIP

Department of Environmental Science and Policy

PhD Researcher / Teaching Assistant

- Co-authored [peer-review article](#) for inter-disciplinary climate journal with impact factor 9.116.
- Led lab meetings and assisted in advising students (4) during their graduate school experience.
- Taught R Programming to ~ 8 graduate students in weekly discussion sessions for 1 semester.
- Taught spatial statistics/programming to ~ 25 undergraduate students, 3x per week, for 1 semester.
- Acquired, cleaned, and performed statistical analysis on (≥ 10) gigabyte sized data sets using R programming.
- Research assistant for [peer-review article](#) in economics journal with impact factor 3.923.

Aug 2018 - Current

Miami, FL

Tampa Bay Regional Planning Council

National Academies of the Sciences: Gulf Research Program's Science Policy Fellow

- Led cross-disciplinary research team on \$500,000 JPMorgan Chase Foundation Grant
- Lead author of Resilience and Energy Assessment of Communities and Housing ([REACH](#)) Report
- Presented results from REACH Report to local policy makers at regional conference

Sep 2021-Aug 2022

Tampa Bay, FL

University of Miami's Office of Community and Civic Engagement

Graduate Researcher

- Led development of [Resilience Policy Toolkit](#) in partial fulfillment of JPMorgan Chase Grant
- Collaborated with a cross-disciplinary team (~ 20 people) to create an interactive map and dashboard identifying climate risk to subsidized housing throughout Miami-Dade County.

Jan 2020 - Jan 2021

Student Led Evaluation and Development (SLED)

Chair (2019-2020)

- Led elected group of 5 graduate students to uphold the academic and professional well-being of RSMAS graduate students.
- Designed and conducted surveys to determine the health of the student-mentor relationship throughout the graduate school.
- Reported results and recommendations to the Graduate Academic Committee to improve programmatic success of student-mentor relationship
- Facilitated trainings and events to foster successful student-mentor relationships such as managing power dynamics.

Aug 2018 - May 2020

TECHNICAL SKILLS

Advanced Programming:

R (Data Wrangling, Econometrics, Spatial Analysis), git, latex

Proficient Programming:

MATLAB, Python, SQL

Software & Tools:

GIS (ArcPro), Arc StoryMaps, Microsoft Suite, Adobe Suite, Qualtrics

Languages:

English (Native), Spanish (Proficient)

Interests:

Tutoring, (International/National) Politics, Golf, Basketball, Reading, My Dog

RESEARCH

Published Papers

Striving for Improvement: The Perceived Value of Improving Hurricane Forecast Accuracy [Bulletin of the American Meteorological Society]

(with R. Molina, D. Letson, B. McNoldy, P. Mozumder)

Working Papers

Hurricane Wilma and Affordable Housing in Southeast Florida [Revise and Resubmit at Journal of Risk Analysis]

(M. Varkony)

Hurricane Irma's Effect on Rental Housing in Florida

(M. Varkony)

Mobile Homes and Climate Risk in Florida

(M. Varkony)

Government Reports

REACH Technical Report: Density Analysis of Flood Risk to Affordable Housing

(with Tampa Bay Regional Planning Council and University of Florida's Shimberg Center for Housing Studies)

AWARD AND HONORS

Graduate Student Coastal and Ocean Fellowship

2023 - 2024

Florida Sea Grant

- Awarded \$25,000 to study Hurricane Irma's effects on rental markets in Florida

- Award funding used to support a chapter of my dissertation

Gulf Research Science Policy Fellowship

2021-2022

National Academies of Sciences, Engineering, and Medicine

- Assigned to the Tampa Bay Regional Planning Council (TBRPC) as a consultant for climate policy research

Graduate Career Development Fund Award

2019

- Awarded \$500 to lead a website development seminar for students at the Marine Science Graduate School

Actuary Exam - P

2015

- Passed Actuary Exam 1