Eric Geiger

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Education

Ph.D., Mathematics, North Carolina State University Advisor: Irina Kogan	2021
M.S., Mathematics, North Carolina State University	2018
B.S., Mathematics, University of North Carolina at Chapel Hill Minor in Religious Studies	2014

Professional Appointments

Yale University, Lecturer	Fall 2021 - Spring 2023

Publications and Preprints

E. Geiger, I. A. Kogan, Non-congruent non-degenerate curves with identical signatures. Accepted to *Journal of Mathematical Imaging and Vision* and published online: https://link.springer.com/article/10.1007/s10851-020-01015-x	2019
J. Agudelo, B. Dippold, E. Geiger, I. Klein, I. A. Kogan, A. Kokot, Curve Reconstruction from Euclidean and Equi-Affine arc-lengths. Paper from 2020 summer REU mentoring. Submitted to *Involve*	2020

Teaching Experience

Yale University

Calculus of Functions of One Variable I	Fall 2021, Summer 2022, Fall 2022
Calculus of Functions of One Variable II	Spring 2022
Calculus of Functions of Several Variables	Spring 2022
Mathematical Models in the Biosciences I: Calculus Techniques	Fall 2021, Fall 2022

North Carolina State University

Calculus I - Asynchronous	Fall 2020
Calculus for Life and Management Sciences B	Spring 2020
Calculus for Life and Management Sciences B	Fall 2019
Introduction to Finite Mathematics	Fall 2018

Other Teaching

Paradoxes and Infinities (3 week course), Johns Hopkins CTY. Seattle, WA	Summer 2019

Research Mentorship

REU Project Mentor,	Summer 2020
Geometric Methods in Computer Vision	
NC State. Raleigh, NC	

Awards and Honors

Project NExT Fellow	2022
Rosenkranz Award for Pedagogical Advancement	2022
NCSU AWM 7-minute Lighting Talk competition co-winner	2020
Thank a Teacher Program, North Carolina State University	2019

Conference Presentations

SIAM Conference on Applied Algebraic Geometry	2021
Group Actions, Invariants, and Applications Special Session	
(Virtual). Speaker.	
Joint Math Meetings (JMM).	2021
Geometry in the Mathematics of Data Science Special Session	
(Virtual). Speaker.	
Geometry of curves in time series and shape analysis.	2020
Max Planck Institute for Mathematics in the Sciences,	
Berlin, Germany (Virtual). Invited Speaker.	
Talk - Non-congruent non-degenerate curves with identical signatures at Triangle Area Graduate Mathematics Conference (TAGMaC).	
North Carolina State University,	2018
Raleigh, USA. Speaker.	

Programming Languages

Python

MATLAB

Maple

Mathematica

Service to Department

Yale University

Member of Climate Committee	2022
Placement Exam	2022
Graduate Student Teaching Mentor	2021-2022

North Carolina State University

Research Presentation for Prospective Graduate Students.	2020, 2021
Committee Chair on Graduate Instructor Support & Tools (GIST)	2019–2020

Extra Training

MAA Project NExT   2022
A year-long professional development program for new or recent Ph.D.s with a focus on improving the teaching and learning of mathematics.

Teaching and Communication Certificate   2021
100 hour program designed to increase accessibility, flexibility, and transferability of teaching and communication training for graduate students and postdocs at NC State.

Accessibility in the Classroom
Online 12 hour course on creating accessible instructional materials.

QPR Institute Suicide Prevention Workshop
2 hour Question, Persuade, & Refer suicide prevention workshop

Project SAFE
Workshop designed to educate participants to understand and address needs of LGBT students

Designing Effective Online Courses Workshop *12 hour workshop*