Shashank Sule

CONTACT INFORMATION

1304 William E. Kirwan Hall
4176 Campus Drive
University of Maryland
College Park, MD 20740-4015

ssule25@umd.edu

EDUCATION

University of Maryland, College Park 2020–2025
Ph.D. candidate in Applied Mathematics, Statistics, and Scientific Computation

Amherst College 2016–2020
A.B. Mathematics, *summa cum laude*
Thesis: Two Multiresolution Frameworks on Graphs

Massachusetts Institute of Technology Spring 2019
Special Student in the Mathematics Department

Budapest Semesters in Mathematics Fall 2018

RESEARCH INTERESTS

Applied Harmonic Analysis, Machine Learning, Spectral Graph Theory

PUBLICATIONS

Sobolev Orthogonal Polynomials on the Sierpinski Gasket (Journal of Fourier Analysis and Applications, 2021). Qingxuan Jiang, Tian Lan, Kasso Okoudjou, **Shashank Sule**, Robert Strichartz, and Sreeram Venkat, and Xiaoduo Wang.

TALKS

Joint Mathematics Meetings 2020 Jan. 2020
AMS Contributed Session on Functional Analysis, Operator Theory, and Operator Algebras I

University of Maryland
Norbert Wiener Center RIT Sept. 2021
Deep Learning RIT Dec. 2021
Machine Learning for rare events RIT Dec. 2021
Student PDE seminar Apr. 2022

Southeastern Undergraduate Mathematics Workshop Aug. 2019
Georgia Institute of Technology

POSTERS

Universita di Genova Sept. 2022
Applied Harmonic Analysis and Machine Learning Summer School
Error analysis of Target Measure Diffusion Maps on $\mathbb{R}^d$

Ohio State University Aug. 2019
Young Mathematicians Conference
Sobolev Orthogonal Polynomials on the Sierpinski Gasket

Amherst College Aug. 2018

Annual Summer Research Symposium
Normality of Toric Rings and Rees Algebras of Strongly Stable Ideals

AWARDS & FELLOWSHIPS

Jacob K. Goldhaber Travel Grant: $1200	Sept. 2022
Michael Brin Graduate Fellowship	Aug. 2020−Jun. 2024
Dean's Fellowship, University of Maryland	Aug. 2020−Jun. 2022
The Robert H.Breusch Prize for the best undergraduate thesis in Mathematics and Statistics	May 2020
The Walker Award in Mathematics and Statistics	May 2020
Amherst Memorial Fellowship	Aug. 2020−Jun. 2021
Loeb Center Summer Experience Fellowship	Jun. 2019
Sarles Fellowship, Amherst College	Jun. 2018
Gregory S. Call Academic Internship	Aug. 2017−May 2018
Davis United World College Scholarship	Aug. 2016−May 2020
First Place and Outstanding Award in SCUDEM 2018	Apr. 2018

ACTIVITIES & EMPLOYMENT

Co-organizer, Research Interaction Team — Sept. 2022
Machine Learning for Rare Events

Co-organizer, Research Interaction Team — Feb. 2022
Deep Learning

Research Assistant — Aug, 2021-May 2022
UMD Mathematics Department

Research Assistant — Summer 2021
Centre for Bioinformatics and Computational Biology

Cornell Universiy SPUR/REU — Summer 2019
Analysis on Fractals

Amherst College SURF — Summer 2018
Algebraic Geometry

Research Assistant — Aug. 2017− May 2018
Economics Department, Amherst College

Co-Chair — Spring 2018
Amherst College International Students' Association

Treasurer — Spring 2017
Amherst College South Asian Students' Association

Staff Writer — Fall 2017
The Indicator

Support Facilitator — Jun. 2015, 2016, 2017
UWC Mahindra College

TEACHING EXPERIENCE

Teaching Assistant, Amherst College

- MATH 250−Number Theory — Spring 2020
- MATH 320−Wavelets and Fourier Analysis — Fall 2019

- MATH 220−Mathematical Reasoning and Proof — Fall 2019
- ECON 330−Macroeconomics — Spring 2018
- CHEM 160−Chemical thermodynamics — Fall 2017

Skills and Languages

MATLAB, Julia, Mathematica, Python, R

Github: `https://github.com/ShashankSule`

English (native), Marathi (native), Hindi (native), Spanish (reading and writing proficiency), Hungarian (reading proficiency)