

EDUCATION	University of Pennsylvania Ph.D., Mathematics	Philadelphia, PA 2019 – 2024 (Expected)
	Title: <i>Admissible Groups over Global Fields</i> Advisor: Prof. David Harbater	
	University of Pennsylvania M.S.E., Computer & Information Science (GPA 4.0/4.0)	Philadelphia, PA 2017 – 2019
	Indian Institute of Technology Delhi B.Tech., Computer Science & Engineering	New Delhi, India 2010 – 2014
PUBLICATIONS	“Admissible groups over global fields”. 2024 manuscript, available at deependra230.github.io/pdf/-admissibility.pdf	
	“Enhanced integrated gradients: improving interpretability of deep learning models using splicing codes as a case study”, with A. Jha, J. Aicher, and Y. Barash. <i>Genome Biology</i> , Vol. 21 (2020), pp. 1–22.	
	“Automating Relevance Banding in e-Commerce Search using Click Model”, with V. Deolalikar. <i>IEEE International Conference on Big Data</i> , 2018, pp. 3793-3797.	
	“Islands of Interest: Mining Concentrations of User Search Intent over e-Commerce Product Categories”, with N. Pradhan and V. Deolalikar. <i>IEEE International Conference on Big Data</i> , 2018, pp. 3717-3722.	
AWARDS AND FELLOWSHIPS	Benjamin Franklin Fellowship University of Pennsylvania	2019–2024
	Certificate in College and University Teaching Penn Center for Teaching and Learning	Fall 2023
	Good Teaching Award University of Pennsylvania Mathematics Department	Spring 2021
	Fellowship in Computer Science University of Pennsylvania	2017–2019
	MHRD scholarship Government of India	2010–2014
TEACHING	University of Pennsylvania <ul style="list-style-type: none"><i>Instructor of Record</i>, Math-1410 Calculus II	Philadelphia, PA Summer 2023
	Penn Pre-First Year Program Program for first generation, low-income undergraduate students. <ul style="list-style-type: none"><i>Instructor of Record</i>, Math-C Pre-Calculus	Philadelphia, PA Summer 2024 (scheduled)

	<ul style="list-style-type: none"> • <i>Teaching Assistant</i>, Math-A Pre-Calculus 	Summer 2023
	Princeton Prison Teaching Initiative Volunteer math instructor for South Woods State Prison in New Jersey.	Spring 2023 – Present
	<ul style="list-style-type: none"> • <i>Tutor</i>, MATH 020 Algebra 	Spring 2024
	<ul style="list-style-type: none"> • <i>Co-Instructor</i>, Math in the Courtroom 	Spring 2023
	University of Pennsylvania	Philadelphia, PA
	<ul style="list-style-type: none"> • <i>Teaching Assistant</i>, Math 3610 Advanced Calculus II 	Spring 2024
	<ul style="list-style-type: none"> • <i>Teaching Assistant</i>, Math 3610 Advanced Calculus II 	Spring 2024
	<ul style="list-style-type: none"> • <i>Teaching Assistant</i>, Math 360 Advanced Calculus I 	Fall 2021
	<ul style="list-style-type: none"> • <i>Teaching Assistant</i>, Math 509 Honors Analysis II 	Spring 2021
	<ul style="list-style-type: none"> • <i>Teaching Assistant</i>, Math 240 Calculus III 	Fall 2020
	Penn Directed Reading Program Mentor for the following undergraduate reading projects:	Fall 2021 – Present
	<ul style="list-style-type: none"> • <i>Number Theory</i>, Molly Bradley 	Spring 2024
	<ul style="list-style-type: none"> • <i>Quadratic Reciprocity</i>, Angela Cai 	Fall 2023
	<ul style="list-style-type: none"> • <i>Algebraic Curves</i>, Max Wang 	Spring 2023
	<ul style="list-style-type: none"> • <i>Probabilistic Methods</i>, Max Wang 	Fall 2022
	<ul style="list-style-type: none"> • <i>Covering Spaces</i>, Kevin You 	Fall 2021
SERVICE AND FACILITATION	Penn Graduate Algebraic Geometry Seminar Co-organizer of the student algebraic geometry seminar with A. Kwon and E. Lennen.	Fall 2022 - Present
	Patching in Arithmetic Geometry Co-organizer of the graduate student seminar on patching methods in arithmetic geometry.	Spring 2022
	Math Circles Co-organizer of the Math Circles at the West Philadelphia High School with M. Ong.	Summer 2023 - Present
TALKS	Graduate Student Conference in Algebra, Geometry, and Topology	
	<ul style="list-style-type: none"> • <i>Admissible groups over number fields</i> 	Summer 2024 (scheduled)
	Penn Algebra Seminar	
	<ul style="list-style-type: none"> • <i>Admissibility over number fields</i> 	Spring 2024
	Penn Graduate Algebraic Geometry Seminar	
	<ul style="list-style-type: none"> • <i>Rational points on varieties and the Brauer-Manin set</i> 	Spring 2024
	<ul style="list-style-type: none"> • <i>An introduction to Étale cohomology</i> 	Spring 2023
	<ul style="list-style-type: none"> • <i>Admissibility over \mathbb{Q}</i> 	Fall 2022
	Patching in Arithmetic Geometry	
	<ul style="list-style-type: none"> • <i>Patching division algebras over semi-global fields</i> 	Spring 2022
	Expository Talks	
	<ul style="list-style-type: none"> • <i>Grothendieck topologies and cohomology</i> 	Spring 2024

- *Milnor K-theory* Spring 2022
- *Numerical invariants and stability on algebraic stacks* Fall 2021
- *Introduction to spectral sequences* Spring 2021

SELECTED
CONFERENCES
& SEMINARS

- The Mordell conjecture 100 years later Summer 2024 (scheduled)
- RNT: Rethinking Number Theory Summer 2024 (scheduled)
- Graduate Student Conference in Algebra, Geometry, and Topology Summer 2024 (scheduled)
- VaNTAGe Seminar Fall 2023 - Present
- Arizona Winter School 2024: Abelian Varieties Spring 2024
- Algebraic Geometry Northeastern Section (AGNeS) Fall 2023
- Arizona Winter School 2022: Automorphic Forms Beyond GL2 Spring 2022

WORK
EXPERIENCE

- Groupon** Palo Alto, CA
Data Scientist, *Search & Data Mining team* Oct 2015 – June 2017
- Groupon** Chennai, India
Data Scientist, *Data Science team* Jun 2014 – Sep 2015