Sayantani Bhattacharya

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Education

Auburn University, Alabama, USA

Aug 2023 - Present

PhD in Mathematics (CGPA: 3.56)

Tezpur University, Assam, India

2018 - 2020

Master's in Mathematics

Chennai Mathematical Institute, Chennai, India

2015 - 2018

Bachelor's in Mathematics and Computer Science (Dual Degree)

Research Interests

Graph Theory, Combinatorics, and Commutative Algebra.

Publications & Preprints

(If applicable, list here; otherwise, mention "Works in Progress" with expected submission date.)

Research Experience

Master's Project: An Introduction to Manifolds

Supervisor: Dr. Deepjyoti Goswami, Tezpur University (Jan-Apr 2020)

Books Covered: Introduction to Manifolds (Loring W. Tu), Introduction to Smooth Manifolds (J. M. Lee)

Teaching Experience

Graduate Teaching Assistant, Auburn University, AL

Aug 2023 - Present

- Recitation Leader: Calculus I (MATH 1610), Spring 2025
- Instructor of Record: College Algebra (MATH 1000), Fall 2024
- Graduate Teaching Assistant: Linear Differential Equations (MATH 2650), Fall 2023; Calculus I (MATH 1610, 1617), Spring 2024; MATH 1000/1120/30/50 & 2650 in Summer 2024

Conferences & Workshops

- AMS Spring Southeastern Sectional Meeting, Clemson University, Mar 2025
- Atlanta Lecture Series (ALS 29) in Combinatorics and Graph Theory, Georgia State University, Nov 2024
- 33rd Cumberland Conference, Mississippi State University, May 2024

- Shanks Workshop on Combinatorics and Graph Theory, Vanderbilt University, Apr 2024
- Yellowhammer Network of Women in Mathematical Sciences, University of Alabama, Feb 2024
- Advanced Instructional School on Advanced Linear Algebra (AIS-ALA 2022), ATM Schools, National Center for Mathematics, Mumbai, India, May, 2022

Fellowships & Awards

- Graduate Teaching Assistantship and Fellowship, Auburn University (2023–Present)
- CSIR NET-JRF Awardee (2019)
- INSPIRE SHE Fellowship, Govt. of India (2015–Present)
- Institutional Fellowship at Chennai Mathematical Institute (Undergraduate Level)

Technical Skills

Programming: Python, C, SageMath, LaTeX, MATLAB

Tools: PSPP (for data analysis)

Professional Memberships

Member, Association for Women in Mathematics (AWM)

Service & Outreach

- President, College of Science & Mathematics International Students Association (CISA), Auburn University (Nov 2023 – Aug 2024)
- Treasurer, Association for Women in Mathematics (AWM), Auburn University (May 2024

 Present)
- Volunteer, Mathematical Puzzle Programs (MaPP), Department of Math-Stat, Auburn University (Feb 2025)
- Mentor, First Year Experience (FYE) Mentorship Program, Graduate Student Council, Auburn University (Feb 2025 - Present)
- Volunteer, COSAM Science Olympiad, Auburn University (Mar 2025)