

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.

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)
- Council of Scientific and Industrial Research (CSIR) National Eligibility Test (NET) with Junior Research Fellowship (JRF) Awardee (Nov 2019)
- INSPIRE Scholarship for Higher Education (SHE) Fellowship, Govt. of India (2015–2018)
- Institutional Fellowship at Chennai Mathematical Institute for Undergraduates (2015–2018)

Technical Skills

Programming: Python, C, SageMath, LaTeX, MATLAB

Tools: PSPP

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)