

Department of Statistics and Data Science,  
The Wharton School,  
University of Pennsylvania,  
Room 301, Academic Research Building,  
265 South 37th Street,  
Philadelphia, PA 19104

Email: [anirbanc@wharton.upenn.edu](mailto:anirbanc@wharton.upenn.edu)  
Website: [anirbanc96.github.io/main/](https://anirbanc96.github.io/main/)  
GitHub: [anirbanc96](https://github.com/anirbanc96)

---

## Education

**Ph.D. in Statistics**, *The Wharton School, University of Pennsylvania, Philadelphia, United States.*

*Expected Graduation: May 2025.*

Advisor: Dr. Bhaswar B. Bhattacharya.

**Master of Statistics**, *Indian Statistical Institute, Kolkata, India.*

*Graduated: 2020.*

First Division with Distinction, Specialization: Probability.

**Bachelor of Statistics (Hons.)**, *Indian Statistical Institute, Kolkata, India.*

*Graduated: 2018.*

First Division with Distinction.

---

## Publications

---

### Journal Publications

- **Anirban Chatterjee**, Bhaswar B. Bhattacharya. Boosting the Power of Kernel Two-Sample Tests. *Biometrika*, 2024.
- **Anirban Chatterjee**, Sagnik Nandy, Ritwik Sadhu. Detecting Planted Partition in Sparse Multilayer Networks. *Information and Inference: A Journal of the IMA*, Volume 13, Issue 3, 2024.
- Bhaswar B. Bhattacharya, **Anirban Chatterjee**, Svante Janson. Fluctuations of Subgraph Counts in Graphon based Random Graphs. *Combinatorics, Probability and Computing*, Volume 32, Issue 3, 2023.
- **Anirban Chatterjee**, Rajat Subhra Hazra. Spectral Properties for the Laplacian of a Generalized Wigner matrix. *Random Matrices: Theory and Applications*, Volume 11, No. 03, 2022.

---

### Conference Publications

- Abhinav Chakraborty, **Anirban Chatterjee**, Abhinandan Dalal. PrIsing: Privacy-Preserving Peer Effect Estimation via Ising Model. *In Proceedings of The 27th International Conference on Artificial Intelligence and Statistics (AISTATS)*, PMLR 238:2692-2700, 2024.

---

### Preprints

- **Anirban Chatterjee**, Ziang Niu, Bhaswar B. Bhattacharya. A Kernel-Based Conditional Two-Sample Test Using Nearest Neighbors (with Applications to Calibration, Regression Curves, and Simulation-Based Inference). *arXiv:2407.16550*, 2024 (Under review at *The Journal of the Royal Statistical Society, Series B*).
- **Anirban Chatterjee**, Soham Dan, Bhaswar B. Bhattacharya. Higher-Order Graphon Theory: Fluctuations, Degeneracies, and Inference. *arXiv:2404.13822*, 2024 (Under review at *The Annals of Statistics*).
- **Anirban Chatterjee**, Jiaoyang Huang. Fluctuation of the Largest Eigenvalue of a Kernel Matrix with application in Graphon-based Random Graphs. *arXiv:2401.01866*, 2024 (Under review at *The Annals of Applied Probability*).

## Teaching and Mentoring

---

**Teaching Assistant**, The Wharton School, University of Pennsylvania.

- Fall 2023 - Mathematical Statistics (STAT 4320).
- Fall 2022 - Statistical Methodology (STAT 9610).
- Spring 2022 - Mathematical Statistics (STAT 432).

**Graduate Mentor**, *Undergraduate Research in Probability and Statistics (URPS)*, University of Pennsylvania, 2022.

## Awards & Honors

---

- **J. Parker Bursk Award for Excellence in Research**, University of Pennsylvania, 2024.
- **George James Term Fund for The Bernoulli-IMS 11th World Congress in Probability and Statistics**, University of Pennsylvania, 2024.
- **Nominated for the Lawrence D. Brown Student Paper Award**, University of Pennsylvania, 2023.
- **George James Term Fund for the Joint Statistical Meetings**, University of Pennsylvania, 2023.
- **Nominated for the Prasanta Chandra Mahalanobis Gold Medal**, Indian Statistical Institute, 2020.
- **Dean's List for Toppers**, Indian Statistical Institute, 2016 – 2020.

## Industry Experience

---

**Project Team Member**, TCS ion, *Form and Performance Analytics for Large Scale Online Assessments*, 2017.

- Collaborated with a multidisciplinary team to design and implement performance analytics for large-scale online assessment platforms used by educational institutions.
- Conducted in-depth statistical analysis on assessment data, identifying key metrics to evaluate student performance across various parameters.
- Presented findings and insights to senior management, contributing to strategic decisions on improving efficacy of online assessments.

## Professional Service

---

- Reviewer for journals: *Journal of the American Statistical Association*, *Biometrika*, *The Annals of Applied Probability*, *Bernoulli*, *Stochastic Processes and their Applications*, *Annales de l'Institut Henri Poincaré*.

## Technical Skills

---

- **Programming Languages**: R, Python.
- **Tools and Software**: LaTeX.

## Conferences & Workshops

---

**Bernoulli-IMS 11th World Congress in Probability and Statistics**, Bochum, Germany, 2024.

- Topic: Higher Order Graphon Theory: Fluctuations and Inference.

**ICSA-Canada Chapter 2024 Symposium** *Niagra Falls, Canada, 2024.*

- Topic: Higher Order Graphon Theory: Fluctuations and Inference.

**Lawrence D. Brown Student Workshop, University of Pennsylvania, Philadelphia, USA, 2023.**

- Topic: Higher Order Graphon Theory: Fluctuations and Inference.

**Joint Statistical Meeting, Toronto, Canada, 2023.**

- Topic: Clustering Network Vertices in Sparse Contextual Multilayer Networks.

**ASU Seminar, Indian Statistical Institute, Kolkata, India, 2023.**

- Topic: Higher Order Graphon Theory: Fluctuations and Inference.

**IMS Annual Meeting, London, UK, 2022.**

- Topic: Fluctuations of Subgraph counts in Graphon based Random Graphs.

**P.C.M. Gold Medal Presentation, Indian Statistical Institute, Kolkata, India, 2020.**

- Topic: Graphon Estimation.