Anirban Chatterjee

Curriculum Vitae

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Education

2020– present **Ph.D.**, *Department of Statistics and Data Science, The Wharton School, University of Pennsylvania*, Philadelphia, United States.
Advisor: Prof. Bhaswar B. Bhattacharya, **Expected Graduation:** 05/2025

2018–2020 **Master of Statistics**, *Indian Statistical Institute*, Kolkata, India.
First Division with Distinction, Specialization: Probability

2015–2018 **Bachelor of Statistics**, *Indian Statistical Institute*, Kolkata, India.
First Division with Distinction

Publications

Journal Publications

2023 Bhaswar B Bhattacharya, **Anirban Chatterjee**, and Svante Janson. Fluctuations of subgraph counts in graphon based random graphs. *Combinatorics, Probability and Computing*, 2023.

2022 **Anirban Chatterjee** and Rajat Subhra Hazra. Spectral properties for the Laplacian of a generalized Wigner matrix. *Random Matrices: Theory and Applications*, 2022.

Conference Publications

2024 Abhinav Chakraborty, **Anirban Chatterjee**, and Abhinandan Dalal. PrIsing: Privacy-Preserving Peer Effect Estimation via Ising Model. *arXiv e-prints*, 2024. (Accepted at AISTATS 2024).

Preprints

2024 **Anirban Chatterjee** and Jiaoyang Huang. Fluctuation of the Largest Eigenvalue of a Kernel Matrix with application in Graphon-based Random Graphs. *arXiv e-prints*, 2024.

2023 **Anirban Chatterjee** and Bhaswar B Bhattacharya. Boosting the Power of Kernel Two-Sample Tests. *arXiv e-prints*, 2023. (Revision requested at Biometrika).

2022 **Anirban Chatterjee**, Sagnik Nandy, and Ritwik Sadhu. Clustering Network Vertices in Sparse Contextual Multilayer Networks. *arXiv e-prints*, 2022. (Major Revision at Information and Inference: A journal of the IMA).

Ongoing Projects

2024+ *A Nearest Neighbour Approach To Validation of Model Calibration, Regression Curves and Simulation-Based Inference*.

Joint work with: Bhaswar B. Bhattacharya, Ziang Niu

2024+	***Difference in Difference method analysis using Quadruple Matching***.
	Joint work with: Bhaswar B. Bhattacharya, Siyu Heng, Hannah A. Jin, Bikram Karmakar and Dylan Small
2024+	***Higher Order Graphon Theory: Fluctuations and Inference***.
	Joint work with: Bhaswar B. Bhattacharya and Soham Dan
2024+	***Asymptotics of Pattern Density in Random Permutations***.
	Joint work with: Bhaswar B. Bhattacharya, Sayan Das, Sumit Mukherjee

Research Internship

2019	***Optimal Transport in Minimax Estimation and Dimension Reduction***, *Columbia University in the City of New York*.
Advisor :	**Dr. Bodhisattva Sen**, *Deparment of Statistics*, Columbia University, New York, USA

Industry Experience

2017	***Form and Performance Analytics for Large Scale Online Assessments***.
Position :	Project team member, TCS ion

Professional Service

2022-present	**Reviewer for Journals**.
	Journal of the American Statistical Association, Biometrika, Bernoulli.

Presentation

2023	***Joint Statistical Meeting***, Toronto, Canada. Topic: Clustering Network Vertices in Sparse Contextual Multilayer Networks.
2023	***ASU Seminar***, Indian Statistical Institute, Kolkata, India. Topic: Higher Order Graphon Theory: Fluctuations and Inference.
2022	***IMS Annual Meeting***, London, UK. Topic: Fluctuations of Subgraph counts in Graphon based Random Graphs.
2020	***P.C.M. Gold Medal Presentation***, Indian Statistical Institute, Kolkata, India. Topic: Graphon Estimation.

Programming Languages

R, Python, C

Teaching and Mentoring

2023	***Teaching Assistant***, The Wharton School, University of Pennsylvania. STAT 432 - Mathematical Statistics
2022	***Teaching Assistant***, The Wharton School, University of Pennsylvania. STAT 961 - Statistical Methodology, STAT 432 - Mathematical Statistics
2022	***Undergraduate Research in Probability and Statistics***, University of Pennsylvania. Position: Graduate Mentor Topic: Inhomogeneous W-random Graphs

Fellowships & Awards

2016 – 2020 **Dean's List for Toppers** at Indian Statistical Institute, Kolkata