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

GPA: 4.00

2018–2020: Master of Statistics, Indian Statistical Institute, Kolkata, India.

Specialization: Probability Total Percentage Score : 91.6%

2015–2018: Bachelor of Statistics, Indian Statistical Institute, Kolkata, India.

Total Percentage Score : 85.03%

Publications

Journal Articles

- 2023 Bhaswar B Bhattacharya, **Anirban Chatterjee**, and Svante Janson. Fluctuations of subgraph counts in graphon based random graphs. *Combinatorics, Probability and Computing*, volume 32, pages 428–464. Cambridge University Press, 2023.
- 2022 Anirban Chatterjee and Rajat Subhra Hazra. Spectral properties for the Laplacian of a generalized Wigner matrix. *Random Matrices: Theory and Applications*, volume 11, page 2250026. World Scientific, 2022.

Preprints

- 2023 **Anirban Chatterjee** and Bhaswar B Bhattacharya. Boosting the Power of Kernel Two-Sample Tests. *arXiv e-prints*, 2023.
- 2022 **Anirban Chatterjee**, Sagnik Nandy, and Ritwik Sadhu. Clustering Network Vertices in Sparse Contextual Multilayer Networks. *arXiv e-prints*, 2022.

Ongoing Projects

2023+ Higher Order Graphon Theory: Fluctuations and Inference.

Joint work with: Bhaswar B. Bhattacharya and Soham Dan

- 2023+ Differentially Private Estimation in Ising Models.

 Joint work with: Abhinav Chakraborty and Abhinandan Dalal
- 2023+ A Nearest Neighbour Approach To Testing for Calibration.

 Joint work with: Bhaswar B. Bhattacharya, Ziang Niu
- 2023+ Fluctuations of the Largest Eigenvalue in Graphon Based Random Graphs.

Joint work with: Jiaoyang Huang

2023+ 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**, *Department 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