# Anirban Chatterjee

## Curriculum Vitae

Room: 308, 265 South 37<sup>th</sup> Street

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anirbanc96.github.io/main/

#### Education

2020- Ph.D., Department of Statistics and Data Science, The Wharton School, University

present 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*, 2023.
- 2022 **Anirban Chatterjee** and Rajat Subhra Hazra. Spectral properties for the Laplacian of a generalized Wigner matrix. *Random Matrices: Theory and Applications*, 2022.

## **Preprints**

- 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.

## Ongoing Projects

- 2023+ *A Nearest Neighbour Approach To Testing for Calibration*. Joint work with: Bhaswar B. Bhattacharya, Ziang Niu
- 2023+ *Differentially Private Estimation in Ising Models*.

  Joint work with: Abhinav Chakraborty and Abhinandan Dalal
- 2023+ *Higher Order Graphon Theory: Fluctuations and Inference*. Joint work with: Bhaswar B. Bhattacharya and Soham Dan
- 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