Nabarun Deb

Curriculum Vitae/Resume

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🖥 *http://nabarund.github.io/*

Education

2017- **Doctor of Philosophy**, *Columbia University*, New York, USA.
-*Department of Statistics.*
-Supervised by *Dr. Bodhisattva Sen* and *Dr. Sumit Mukherjee*.

2015-2017 **Master of Statistics (M. Stat)**, *Indian Statistical Institute*, Kolkata, India.
-Specialization: Theoretical Statistics.
-Dissertation under *Dr. Moulinath Banerjee*.
- First Division with Distinction.

2012-15 **Bachelor of Statistics (B. Stat)(Hons)**, *Indian Statistical Institute*, Kolkata, India.
- First Division with Distinction

Research Interests

— Nonparametric inference

— Theory of optimal transport and its applications in statistics

— Multiple hypotheses testing

— Graphical models and theory of dependent observations

Awards and Achievements

2019 *Student Paper Competition winner* in the Theory & Methods section, *International Indian Statistical Association (IISA), Mumbai, India*

2017 Nominated for the Prasanta Chandra Mahalanobis Gold medal for outstanding performance in the Master of Statistics Programme, Indian Statistical Institute, Kolkata, India.
-Awarded to the top 4 students in class

2012 An INMO *Indian National Mathematical Olympiad* merit certificate holder.
-Awarded to the top 75 students in the country

2012 A recipient of the award of Scholarship for Higher Education (SHE) under Innovation in Science Pursuit for Inspired Research *INSPIRE*.
-It is awarded to the top 1% students in the Indian School Certificate Examinations, 2012

Papers

— Deb, N., Ghosal, P., and Sen, B. (2020+). Measuring Association on Topological Spaces Using Kernels and Geometric Graphs. (Status: **Submitted**, `https://arxiv.org/pdf/2010.01768.pdf`)

— Deb, N., and Mukherjee, S. (2020+). Fluctuations in Mean-Field Ising Models. (Status: **Submitted**, `https://arxiv.org/pdf/2005.00710.pdf`)

— Deb, N., and Sen, B. (2019+). Multivariate Rank-based Distribution-free Nonparametric Testing using Measure Transportation. (Status: **"Major revision requested"** at *J. Amer. Statist. Assoc.*, `https://arxiv.org/pdf/1909.08733.pdf`)

— Deb, N., Saha, S., Guntuboyina, A., and Sen, B. (2018+). Two-component Mixture Model in the Presence of Covariates. (Status: **"Accepted"** at *J. Amer. Statist. Assoc.*, `https://arxiv.org/pdf/1810.07897.pdf`). See `https://github.com/NabarunD/NPMLEmix` for the **associated R package**

Talks, Conferences and Workshops

2020   (Talk) ETH Zurich, Young Data Science Researcher Seminar.
       Title : *Measuring Association on Topological Spaces Using Kernels and Geometric Graphs*

2020   (Talk) University of Berkeley, at the Berkeley-Columbia Meeting in Engineering and Statistics.
       Title : *Multivariate Rank-based Distribution-free Nonparametric Testing using Measure Transportation*

2020   Participated in "Talking across fields", Stanford University — a conference in honor of Prof. Persi Diaconis

2019   (Talk) International Indian Statistical Association (IISA) Conference, student paper award for Theory & Methods section.
       Title : *Multivariate Rank-based Distribution-free Nonparametric Testing using Measure Transportation*

2019   (Talk) Joint Statistical Meeting, Denver, Colorado — contributed session.
       Title : *Two-component Mixture Model in the Presence of Covariates*

2019   (Talk) Saint Flour Probability Summer School — student talk.
       Title : *Fluctuations in Mean-Field Ising Models*

2019   (Talk) Minghui Conference, Columbia University.
       Title : *Fluctuations in Mean-Field Ising Models*

2017   Participated in the Banff International Research Station for Mathematical Innovation and Discovery (BIRS) Workshop on Shape-Constrained Methods: Inference, Applications, and Practice, Alberta, Canada

Technical expertise

Software Packages	R, Matlab, Gurobi, Mathematica, Geogebra LaTeX, HTML, Macromedia Flash	Programming Languages	Basic, Java, C, C++,

Miscellaneous information

Reviewer duties	Reviewed papers for the following journals/conferences: (1) Annals of Statistics, (2) Electronic Journal of Statistics, (3) Biometrika, (4) International Conference on Machine Learning (2020), (5) Insurance: Mathematics and Economics, and (6) Journal of Statistical Planning and Inference
Teaching experience	Qualifying Exams workshop (Theoretical Statistics) for Ph.D. students Summer 2019 -Teaching assistant in the following courses: (1) Theoretical Statistics for first year Ph.D. students (2019 & 2020), (2) Nonparametric statistics, both Masters and Undergrad levels (2018), (3) Statistical Inference, Masters level (2017, 2018, 2019), (4) Probability, Masters level (2017, 2018, 2019), and (5) Calculus-based Introduction to Statistics, Undergrad level (2020)
Communication Skills	Fluent in speaking and writing English, Bengali, Hindi
Hobbies	An avid sports lover, particularly interested in following cricket, lawn tennis and table tennis. A voracious reader and poetry lover, I also love watching movies, listening to music and playing the synthesizer at leisure

I hereby do certify that all the above information is true to the best of my knowledge.
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