Curriculum Vitae
Arnab Auddy

Ph.D. Student
Columbia University
Statistics Department

PERSONAL DETAILS

- ***Date of Birth:*** 7th July 1995
- ***Address:*** 1005 SSW, 1255 Amsterdam Avenue, New York, NY 10027
- ***Email:*** arnab.auddy@columbia.edu
- ***Contact No.:*** +19195907146

EDUCATION

1. Columbia University. Ph.D. student (started fall 2018). Current GPA 4.08/4.0
2. Indian Statistical Institute: M.Stat. Graduated with Distinction (2016-2018) Specialization: Theoretical Statistics
3. Indian Statistical Institute: B.Stat. Graduated with Distinction (2013-2016)

RESEARCH INTERESTS

I am currently working on low rank approximation of noisy tensors and their application to latent variable models. I am also interested in other dimension reduction procedures and compressed sending problems.

ACADEMIC ACHIEVEMENTS

- Received prize money from ISI Kolkata for good academic performance in M.Stat 1st year, 1st and 2nd semesters.
- Recipient of KVPY fellowship (stream SA), given by Department of Science and Technology, Government of India, (2012-2018).
- Ranked in the top 1 percent among 40721 students in National Standard Exam in Physics (NSEP) 2012-13.

PUBLICATIONS

1. **Auddy, A.**, & Yuan, M. (2020). Perturbation Bounds for orthogonally decomposable tensors and their applications in high dimensional data analysis. arXiv preprint arXiv:2007.09024.
2. KhudaBukhsh, W. R., **Auddy, A.**, Disser, Y., & Koeppl, H. (2018). Approximate lumpability for Markovian agent-based models using local symmetries. Journal of Applied Probability 56 (3), 647-671

PROJECTS

- TITLE: Tractable estimation of Orthogonally decomposable tensors
  WITH: Dr. Ming Yuan (Columbia University)

- TITLE: Identifying Vulnerability Indices for COVID spread in India
  WITH: Rupam Bhattacharyya, Subha Maity and Dr. Veerabhadran Baladandayuthapani (University of Michigan)

- TITLE: Testing Significance of Regression Coefficients in High Dimensions (**Master's Dissertation**)
  GUIDE: Dr. Probal Chaudhuri (Statistics and Mathematics Unit, ISI Kolkata)

- TITLE: Approximate Markov Chain Lumpability for Dynamical Processes on Random Graphs using Local Graph Automorphisms
  (**published in Journal of Applied Probability**)
  GUIDE: Dr. Heinz Koeppl, Technische Universitat Darmstadt, Germany

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TEACHING

I have worked as a teaching assistant in the following courses:

- Probability and Statistical Inference (Master's level, fall 2018)
- Nonparametric Statistics (Master's level, spring 2019)
- Introduction to Statistics with Calculus (Undergraduate level, summer 2019)
- Bayesian Statistics (Master's level, fall 2019)
- Generalized Linear Models (Master's level, spring 2019)
- Linear Regression Models (Master's level, fall 2020)

TECHNICAL EXPERTISE

- advanced R, intermediate Python
- Data Analysis Softwares: RapidMiner, Minitab

OTHER INFORMATION

- Attended the SIAM Conference on Algebraic Geometry in Bern, July 2019
- Attended the international workshop on 'Statistical Challenges in High-dimensional and Complex Data' at Columbia University in September 2018
- Attended the International Conference on Robust Statistics, Indian Statistical Institute, 2015
- Attended the Winter School on Interplay between Statistics and Cryptology at Indian Statistical Institute Kolkata in 2014
- Runner up in the **CRISIL** Young Thought Leader Essay Competition 2016, Topic: **Analytics and Data Mining**
- Extra Curricular Activities: Photography, Quizzing, Solving Puzzles
- Languages known: Fluent in English, Bengali and Hindi. Elementary knowledge of French.

-Arnab Auddy
November 7, 2020