Summer 2023, Fall 2022

Email: ghoshadi@stanford.edu Department of Statistics, Stanford University CONTACT **ADDRESS Phone:** +1 (650) 382 7711 390 Jane Stanford Way, Sequoia Hall **DETAILS** Stanford, CA 94305 Ph.D. in Statistics, Stanford University GPA 4.13 EDUCATION 2022 - present Masters of Statistics (M.Stat), Indian Statistical Institute, Kolkata 2020 - 2022 • Dissertation advisor: Prof. Bodhisattva Sen (Columbia University) • **Specialization:** Theoretical Statistics Bachelor of Statistics (B.Stat), Indian Statistical Institute, Kolkata 2017 - 2020RESEARCH Broadly interested in theoretical statistics and applied probability; particularly in causal inference, nonparametric methods, random graphs, random matrices and their applications in statistics. 2. Ghosh, A., Deb, N., Karmakar, B., & Sen, B. (2021+). Efficiency and Robustness of Regression (Un)-Adjusted Rosenbaum's Rank-based Estimator in Randomized Experiments. Submitted. 🗷 1. Ghosh, A. (2019). An asymptotic formula for the Chebyshev theta function. Notes on Number Theory and Discrete Mathematics, 25(4), 1-7.  $\Box$ • Computational and Methodological Statistics, HTW Berlin, University of Applied Sciences, INVITED **TALKS** Berlin, Germany 2023 Title: Efficiency and robustness of Rosenbaum's regression (un)-adjusted rank-based estimator in randomized experiments • PCM Memorial Lecture, Indian Statistical Institute, Kolkata 2022 **Title:** The synthetic control method in causal inference • D. Basu Memorial Lecture, Indian Statistical Institute, Kolkata 2021 Title: Large low-rank matrix completion • Online Reading Group on Functional Data Analysis ♂ 2021 Title: Two-sample testing of the equality of mean functions • Students' Learning Seminar, Indian Statistical Institute, Kolkata 2021 **Title:** Matching estimators in causal inference Teaching Assistant (TA), Stanford University ExploreCourses ♂ **TEACHING** • Stats 310B/Math 230B: Theory of Probability II. Winter 2023 • Stats 310A/Math 230A: Theory of Probability I. Fall 2023 • Stats 216: Introduction to Statistical Learning. Winter 2022

## Other experiences

• Stats 202: Data Mining and Analysis.

- Trained numerous high school students for mathematical olympiads, entrance examinations of Indian Statistical Institute, Chennai Mathematical Institute, and other competitive exams.
- Maintained a blog (ghoshadi.wordpress.com) aimed at helping high-school students prepare for Mathematical Olympiads and similar competitions.

	Others	
	• Madhava Mathematics Competition, received invitation to a prestigious event	2019, 2018
	• Indian National Mathematical Olympiad, earned a certificate of merit from NBHN India (awarded to the top 75 INMO participants in the country)	M, Govt. of 2016
OLDER PROJECTS & INTERNSHIPS	Rank and matching based methods in causal inference	2021
	• Analyzing a lower back pain data with classmates Anik Burman and Soham Das	2020
	<ul> <li>On Age-dependent branching processes with/without immigration with classman Banik and Shouvik Middey</li> </ul>	tes Wribhu 2020
	• Finding anomalies in a coal quality data of Coal India Limited with classmates S and Arjama Das	Soham Das 2020
	<ul> <li>Typical distance between two randomly selected vertices of a Erdős-Rényi bind dom graph with classmate Sayak Chatterjee</li> </ul>	omial ran- 2020
	Method of moments in random matrix theory	2019
	• Summer Internship in Cryptology, at the R. C. Bose Centre for Cryptology and Sedian Statistical Institute, Kolkata	ecurity, In- 2019

• ISIAA – J. K. Ghosh Memorial Gold Medal (outstanding performance in M.Stat)

• ISIAA – Mrs. M. R. Iyer Memorial Gold Medal (best overall performance in B.Stat)

• Nikhilesh Bhattacharyya Memorial Gold Medal (best performance in Statistics in B.Stat) 2021

2023

2021

**Recognitions from the Indian Statistical Institute** 

**AWARDS**