Rahul Raphael Kanekar

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Education

Stanford University — Stanford, CA
Statistics, Ph.D. — 2021 - 2026 *(expected)*
Advisor: Prof. Sourav Chatterjee

Indian Statistical Institute (ISI) — Bangalore, India
Master of Mathematics (M.Math) — 2019 - 2021
Project advisor : Prof. Yogeshwaran Dhandapani

Chennai Mathematical Institute (CMI) — Chennai, India
B.Sc (Hons.) in Mathematics and Computer Science — 2016-2019
GPA : 8.71/10

Awards and Honors

- **Teacher's Award, ISI** - Awarded to top-3 students every semester — 2019
- **Ranked 3rd Nationally** - ISI Master's Entrance Exam — 2019
- **TIFR Entrance Exam** - Accepted to TIFR Mumbai's Integrated PhD program — 2019
- **Master's Scholarship** - Indian Statistical Institute — 2019-2021
- **Bachelor's Scholarship** - Chennai Mathematical Institute — 2016-2019

Research

I am broadly interested in mathematical statistics, nonparametric testing and graph based methods. During my PhD, I have worked on statistical and probabilistic aspects of geometric graphs arising from high dimensional data.

- **Kanekar, R.** (2025) Power properties of the two-sample test based on the nearest neighbors graph. (Major revision requested at *Annals of Statistics*)
  Preprint : arXiv:2504.10719

Apart from my PhD research, I have been a part of some other projects.

SMARTer Multi-task Fine-tuning of BERT
Stanford University — April 2025
Collaborators: Disha Ghandwani, Aditya Ghosh

A comparison of sensitivity analyses for NBER birth data
Stanford University — June 2025
Collaborator : Timothy Sudijono

Branching Random Walks (BRW) and geometry of graphs
Indian Statistical Institute, Bangalore — April 2020 - March 2021
Supervisor : Prof. Yogeshwaran Dhandapani

Talks

Institut für Mathematik, Humboldt University
Berlin, Germany — September 2025
Title: Power properties of two-sample tests based on geometric graphs

Conference of the International Indian Statistical Association
University of Nebraska, Lincoln — June 2025
Session: Student paper competition (Probability and Theoretical Statistics)

Statistics Department Retreat
Stanford University — May 2025
Title: Power properties of two-sample tests based on geometric graphs

Teaching Experience

As teaching assistant, Stanford University

- Introduction to Stochastic Processes (STATS 217) — Summer 2022, 2023
- Statistical Learning and Data Science (STATS 202) — Winter 2025
- Introduction to Statistical Inference (STATS 200) — Fall 2023
- Introduction to Applied Statistics (STATS 191) — Summer 2024
- Probability for Statistical Inference (STATS 118) — Fall 2024
- Introduction to Probability Theory (STATS 117) — Fall 2022, Spring 2022,2025
- Principles of Data Science (DATASCI 112) — Winter 2023, Summer 2025

Skills

Technical experience : Statistics, Data Structures and Algorithms, Machine Learning, Data Analysis, Deep Learning, Natural Language Processing.

Programming : Python (Pytorch, Scikit-learn, Pandas, Numpy, CVXPY), R. Familiar with Haskell.

Languages : English, Hindi (Fluent), Marathi (Native).