Prateeti Mukherjee

Ph.D. student, University of California San Diego
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Research interests. Statistical learning theory, high-dimensional statistics, and information theory.

Education

Sept. 2024–present — **University of California San Diego**
Halıcıoğlu School of Data Science and Computing
Ph.D. student. Advisor: Arya Mazumdar.

Aug. 2017–July 2021 — **Institute of Engineering and Management**
B.Tech. in Computer Science and Engineering. GPA: 9.5/10.

Academic Positions

June 2020–Jan. 2021 — **Aalto University**, Finland
Research Assistant. Advisors: Yki Kortesniemi and Raimo Kantola.

Mar. 2020–May 2020 — **University of Turku**, Finland
Research Intern. Advisor: Tomi Westerlund.

Industry Positions

Aug. 2021–Aug. 2024 — **Microsoft Research**, India
Research Fellow. Advisor: Satya Lokam.

Feb. 2021–July 2021 — **Amazon**, India
Software Engineering Intern, Amazon Payments.

June 2019–Aug. 2019 — **Vestella Labs**, South Korea
Research Intern. Advisor: Dhananjay Singh.

Selected Publications and Preprints

On the Role of Normalization in Binary Iterative Hard Thresholding for 1-bit Compressed Sensing
with Arya Mazumdar
ACM–SIAM Symposium on Discrete Algorithms (SODA), 2027 (To appear).
Paper

Rare-Tail Statistics For Learning Biased Gaussian Halfspaces with Label Noise
with Arya Mazumdar and Harsh Vardhan
Advances in Neural Information Processing Systems (NeurIPS), 2026 (To appear).
Paper

On the Query Complexity of Training Data Reconstruction in Private Learning
with Satya Lokam
Preprint

Selected Honors

2024 **Doctoral fellowship**
Halıcıoğlu Data Science Institute, UC San Diego.

2021 **Departmental award for outstanding undergraduate research**
Institute of Engineering and Management.

Selected Talks

Fall 2025 **How a Few Clean Samples Tame Noisy Halfspace Learning**
EnCORE Collaboration Workshop.

Spring 2023 **Lower Bounds on Reconstructing Training Data from Private Learners**
Bangalore Crypto Day.

2019 **Sensor Networks with Applications in Pervasive Healthcare**
Google's Women Techmakers Program, Kolkata.

Teaching

Winter 2026 **Teaching Assistant**, University of California San Diego
DSC 255R: Machine Learning Fundamentals.

Reviewing

2026 Neural Information Processing Systems (NeurIPS).
Transactions on Machine Learning Research (TMLR).