

Debodeep Banerjee

Objective

A data scientist with research interests in statistical inference, machine learning, and AI — particularly in healthcare applications — with additional focus on NLP, data visualization, and hybrid AI systems.

Areas of Interest

- Natural Language Processing
- Data Visualization
- Hybrid Artificial Intelligence

Education

- 2022–Present **PhD in Artificial Intelligence**, *University of Pisa & University of Trento*
- 2022 **Master in Data Science**, *Sapienza University of Rome*
- 2018 **M.Sc. in Statistics**, *University of Madras*
- 2016 **B.Sc. in Statistics (Hons)**, *Asutosh College, University of Calcutta*

Work Experience

- 06/2022–10/2022 **Intern**, *Project Consulting SRL*, AI in video analysis
- 07/2021–01/2022 **AI Intern**, *Baker Hughes*, Deep learning on turbomachinery data
- 05/2018–08/2018 **Subject Matter Expert (Statistics)**, *SPI Global Private Ltd.*
- 05/2017–06/2017 **Research Intern**, *Indian Statistical Institute*
Data analysis using bootstrapping and logistic regression.

Publications

- [Under review] Banerjee, Debodeep, et al. "Learning to guide human decision makers with vision-language models."
- [Preprint] Banerjee, Debodeep, et al. "MedGellan: LLM-Generated Medical Guidance to Support Physicians."
Workshop on Hybrid Human-Machine Learning and Decision Making (HLDM'25) @ ECMLPKDD 2025

Presentations

- 2018 International Conference on Theory and Application of Statistics and Information Science – Bayesian analysis of $1 \times j$ contingency table
- 2018 National Conference at Marian College – CSR and Sustainable Development in India

Research Projects

- Master in Data Science **Title:** Nonparametric Modal Regression for Directional Responses
Supervisor: Prof. Pierpaolo Brutti
Developed EM-based modal regression algorithm for directional predictors and linear responses.
- M.Sc. Statistics **Title:** A Study on Classical Inference on Single Binomial Proportion
Supervisor: Dr. Subbiah M.
Focused on evaluating confidence intervals using coverage probability and expected run length.

Technical Report

- 2017–2018 **Title:** Comparative Analysis of Two $1 \times j$ Contingency Table under Bayesian Perspective
Authors: Debodeep Banerjee, Trina Sahoo, Dr. Subbiah M., Dr. M.R. Srinivasan
Published in University of Madras Library, used R and Monte Carlo simulation techniques.

Technical Skills

- Languages Python, R
Tools Minitab, SPSS, SQL, Power BI (Beginner), LaTeX
Office Suite MS Word, Excel, PowerPoint, Access

Achievements

- 1 First place in Inter-Departmental Quiz, University of Madras
- 2 First place in Inter-Collegiate Quiz, Madras Christian College

Languages

- Fluent Bengali, Hindi, English
Basic Italian