

## **FACULTY PROFILE (SB)**

**Name:** Dr. Sancharee Basak.

**Designation:** Assistant Professor.

**Department:** Statistics.

**Qualification:**

- M.Sc. in Statistics, University of Calcutta (2015).
- Ph.D. in Statistics, Indian Statistical Institute, Kolkata (2022).

**Email ID:** [sancharee93@sxccal.edu](mailto:sancharee93@sxccal.edu)

**Doctoral Research Topic:** “*Minimum divergence estimation using the extended Bregman divergence and optimal tuning parameter selection*”.

**Teaching Experience:**

- Taught Sampling Distributions, Statistical Inference, Probability and R Programming at the **Department of Statistics of Sister Nivedita University** from November 2021 to June 2022.
- Teaching Probability, Sampling Distributions, Design of Experiments, Demography, Large Sample Theory, R Programming and Minitab at the **Department of Statistics of St. Xavier’s College (Autonomous), Kolkata** since July 2022.
- Teaching Optimization Techniques, Non-Parametric Inference and Linear Models at the **Postgraduate Department of Data Science of St. Xavier’s College (Autonomous), Kolkata** since January 2023.

**Research Interests:**

- Classical parametric inference.
- Minimum distance inference.
- Robust inference.
- Bayesian inference.

**Paper Publications:**

- Sancharee Basak, Ayanendranath Basu and M. C. Jones (2021): **On the ‘optimal’ density power divergence tuning parameter**, *Journal of Applied Statistics*, Volume 48, Issue No. 3, pp 536-556, DOI: 10.1080/02664763.2020.1736524.
- Sancharee Basak and Ayanendranath Basu (2022): **The extended Bregman divergence and parametric estimation**, *Statistics*, Volume 56, Issue No. 3, pp 699-718, DOI: 10.1080/02331888.2022.2070622.
- Sancharee Basak and Ayanendranath Basu (2024): **The extended Bregman divergence and parametric estimation in continuous models**, *Sankhya B*, Volume 86, pp 333-365, DOI: 10.1007/s13571-024-00333-z.
- Sancharee Basak, Uttam Bandyopadhyay and Atanu Biswas (2025): **Partial sequential testing for comparing two univariate normal distributions**, *Sequential Analysis*, Volume 44, Issue No. 1, pp 111-133, DOI: 10.1080/07474946.2024.2443405.

### **Paper Presentations and Participation in Conferences/Seminars/Workshops:**

- Peer-reviewed a paper titled **A new robust approach for the polytomous logistic regression model based on Rényi's pseudodistances** which was published in **Biometrics (Publication Office – Oxford University Press)** in October 2024, DOI: 10.1093/biomtc/ujae125.
- Participated as a resource person in a 3-day workshop on **Data-Driven Decision-Making in Research**, organized by the Department of Statistics in collaboration with the Postgraduate Department of Sociology, St. Xavier's College (Autonomous), Kolkata in July 2024.
- Participated and presented a talk in the **Ninth International Conference on Recent Trends in Statistical Theory and Applications 2024 (WSTA 2024)**, organized by the Department of Statistics, School of Physical & Mathematical Sciences, University of Kerala jointly with International Statistics Fraternity (ISF), Kerala Statistical Association (KSA) and Statistics Fraternity Kerala (SFK) in June 2024.
- Participated in the **One Week National Level Online Faculty Development Program on Outcome Based Education and Application of Generative AI in Teaching and Research**, organized by the Internal Quality Assurance Cell (IQAC) of Gauhati University, Assam in association with ipsr solutions limited from 17th April 2024 to 24th April 2024.
- Participated and presented a talk in the **Ninth International Conference on Statistics for Twenty-First Century 2023 (ICSTC 2023)**, organized by the International Statistics Fraternity (ISF), School of Physical and Mathematical Sciences and the Department of Statistics, University of Kerala, Trivandrum in December 2023.
- Participated and presented a talk in the **International Conference on Statistical Theory and its Applications (ICSTA 2023)**, organized by the Department of Statistics, Bharathiar University, Coimbatore in September 2023.
- Participated and presented a talk in the **Eighth International Conference on Statistics for Twenty-First Century 2022 (ICSTC 2022)**, organized by the International Statistics Fraternity (ISF), School of Physical and Mathematical Sciences and the Department of Statistics, University of Kerala, Trivandrum in December 2022.
- Participated and presented a talk in the **VI International Scientific and Practical Conference 'Statistics and its applications'**, organized by the Namangan Institute of Engineering and Technology, Namangan, Uzbekistan in October 2022.
- Participated and presented a talk at the **Stat Quest (2018)**, organized by the Department of Statistics, University of Calcutta, Kolkata.
- Participated and got certified for securing **third position** in the national level seminar '**Application of Statistical Tools and Techniques in Multidisciplinary Fields**' (2011), sponsored by the UGC, the CSA and the Ministry of Statistics and Programme Implementation, Government of India and organized by the Department of Statistics, Lady Brabourne College, Kolkata.