Name: Dr. Soumya Banerjee
Assistant Professor, Department of Statistics and Postgraduate Department of Data Science.

Qualification: PhD, NIT Durgapur
M.Sc. (Statistics), University of Calcutta
B.Sc. (H) Statistics, St. Xavier's College, Kolkata.

Doctoral Research Topic: "Optimal Portfolio Selection using Soft Computing Techniques: An Indian Perspective"

Email Id: sbstat@sxccal.edu

Teaching Experience: 15 years (Former Assistant Professor and Head, Department of Statistics, Amity University Kolkata)

Research Interests:

- Portfolio Optimization
- Soft Computing Techniques
- Time Series Analysis
- Statistical Inference
- Machine learning

Teaching Interests:

- Statistical Inference
- Time Series Analysis
- Probability and Sampling Distributions
- Regression Analysis
- Sample Survey

Publications:

- Devi, R. R., Banerjee, S., & Chattopadhyay, S. (2023). Dempster–Shafer and LSTM based analysis and forecasting of total ozone data. *Remote Sensing Letters*, *14*(10), 1034–1043. https://doi.org/10.1080/2150704X.2023.2258466.

- Banerjee, S., Gupta, S., Ghosh, A., & Bandyopadhyay, G. (2022). Optimal Portfolio Selection of Equity Mutual Funds using Genetic Algorithm: An Indian Perspective. *Mathematical Statistician and Engineering Applications*, *71*(4), 4620-4631.

- Banerjee, S., Gupta, S., Ghosh, A., & Bandyopadhyay, G. (2022). Selection of Efficient Equity MFs Portfolio in Indian market using Optimization Techniques. NEUROQUANTOLOGY, 20(11), 2056-2072.

- Banerjee, S., Guha, B., Ghosh, A., & Bandyopadhyay, G. (2021, March). Portfolio Structure of Debt Mutual Funds in Indian Market. In *Virtual International Conference on Soft Computing, Optimization Theory and Applications* (pp. 211-220). Singapore: Springer Nature Singapore.

- Banerjee, S., Guha, B., Ghosh, A., & Bandyopadhyay, G.(2022). Forecasting the Performance of Efficient Indian Equity MFs Portfolio using ARIMA. The Seybold Report, 17(09), 161-179.

- Das, A., Dutta, S., Ghosh, A., Mukherjee, B., & Banerjee, S. (2022). An Analytical Study on Effect of Digital Environment on Human Health in Indian Context During COVID-19 Lockdown. *Journal of Environment and Sociobiology*, 183-192.

- Dey, B. K., & Banerjee, S. Building a Machine Learning Model for Covid-19 Diagnosis Based on Symptoms.

- Mitra, S., & Banerjee, S. Analysis of Prudential Life Insurance Customer Evaluator.

- Banerjee, S., Ghosh, A., & Bandyopadhyay, G. (2021). Efficient Portfolio Structure of Hybrid Mutual Fund: An Indian Perspective. *BUSINESS RESEARCH AND INNOVATION*, 33.

- Banerjee, S., Guha, B., Ghosh, A., & Bandyopadhyay, G. (2021, March). Optimal Portfolio Selection of Indian Debt Mutual Funds. Proceedings in Mathematics and Statistics, *4*(4), 211-220.

Participation in Conferences and Workshops

- Delivered an Invited talk on "Data Analysis on CATALYSING ENTREPRENEURSHIP CULTURE & START-UP ECOSYSTEM IN NORTH BENGAL" at AICTE-ATAL FDP in IIAS, University of North Bengal during August 19 – August 24, 2024.

- Delivered an Invited talk on "Statistical Analysis using Non Parametric methods" in FDP on "NON-PARAMETRIC METHODOLOGIES FOR DATA ANALYSIS" organized by Operational Research Society of India (ORSI) during February 8 – February 14, 2025.

- Delivered an Invited talk on "An Introduction to Statistics" on the occasion of National Statistics Day - 2021 organized jointly by JIS and GMIT, MAKAUT on June 29, 2021.

- Delivered an Invited talk on "Optimal Portfolio Structure of Equity MFs: An Indian Perspective" in the 2nd International Conference on Emerging Socio-EconomicTrends and Business Strategy, organised by ISB&M in January 2020.

- Presented a paper on "Selection of an Optimal Portfolio using heuristic techniques" in the International Conference ICBIT during January 30 – January 31, 2025.

- Presented a paper on "Portfolio Optimization using Soft Computing techniques" in Eleventh Calcutta Triennial Symposium on Probability and Statistics, organized by Department of Statistics, University of Calcutta during December 27 – December 30, 2024.

- Presented a paper on "Construction of an Optimal Portfolio using Genetic Algorithm:" at the International Conference ICBMSI'2022, Guwahati, India in November 2022.

- Presented a paper on "Selection of an Optimal Portfolio of Equity MFs using Optimization Techniques: An Indian Perspective" at the International Conference ISAFBM, organised by Assam University in August 2022.

- Presented a paper on "Application of neuro optimization in the Portfolio Structure in Indian Stock Market" at the International Conference SCOTA organized by BIT Mesra in March 2021.

- Presented a paper on "Optimal Portfolio Structure of Balanced MFs: An Indian Perspective" in the Management Doctoral Colloquium organised by IIT Kharagpur in February 2021.

- Presented a paper in Optimal Portfolio Structure of ELSS MFs: An Indian Perspective" in the 2nd International Conference on Resilience for Sustainability, organised by The North Cap

University in March 2021.

- Presented a paper in "Efficient Portfolio Structure of Hybrid MFs" in the 1st International Conference on Business Research and Innovation, organised by ICBRI in February 2021

- Presented a paper on "Optimal Portfolio Structure of Large Cap MFs using Generalised Reduced Gradient Method: An Indian Perspective" in 2nd International Conference on FORBS, organised by ORSI, Durgapur Chapter in December 2019. (Received the Best Paper Award)

Responsibilities Held

- Head, Department of Statistics, Amity University Kolkata. (January 2020 – March 2025)

- Events and Sports Coordinator, Amity Institute of Applied Sciences, Amity University Kolkata. (January 2022 – March 2025)

- Secretary, University Sports Committee, Amity University Kolkata (January 2018 – December 2021)

- Member Secretary, Newsletter Committee, Amity Institute of Applied Sciences, Amity University Kolkata. (January 2023 – March 2025)

- Life Member, Calcutta Statistical Association.