

Name: Dr. Durba Bhattacharya

Designation: Head of the Department

Department: Statistics

Qualification: • M.Sc. in Statistics, Calcutta University (2004)

• PhD in Statistics, Indian Statistical Institute, Kolkata (2019)

Doctoral Research Topic: "Bayesian Nonparametric Approaches to Investigating Gene-Gene and Gene-Environment Interactions in Case-Control Studies".

Teaching Experience: 15 years of experience in Undergraduate teaching.

Research Interests:

- Bayesian Non-parametric Modelling,
- Bayesian computation, Bio-statistics,
- Multi-objective optimization,
- Machine learning.

Publications:

- Effects of Gene-Environment and Gene-Gene Interactions in Case-Control Studies: A Novel Bayesian Semiparametric Approach, February 2020, Brazilian Journal of Probability and Statistics, Vol-34, Number 1 (2020), 71-89, 10.1214/18-BJPS413
- A Hybrid Multi-Objective Tour Route Optimization Algorithm Based on Particle Swarm Optimization and Artificial Bee Colony Optimization. Computational Intelligence, 25th January 2020, Computational Intelligence, Vol 36, Issue 3, 884-909, DOI: 10.1111/coin.12276
- Hierarchical Multi-Objective Route Optimization for Solving Carpooling Problem, April 2020, Proceedings of the Global AI Congress 2019, Pages-377-390, DOI: 10.1007/978-981-15-2188-1_30
- "A Bayesian Semiparametric Approach to Learning About Gene-Gene Interactions in Case-Control Studies", Journal of Applied Statistics, Volume 45, 2018 - Issue 16, 2906-2928, doi.org/10.1080/02664763.2018.1444741
- "A Non-Gaussian, Nonparametric Structure for Gene-Gene and Gene-Environment Interactions in Case-Control Studies Based on Hierarchies of Dirichlet Processes"- arXiv.org

Paper Presentation and Participation in Conferences:

- Presented Paper in the "Tenth International Triennial Calcutta Symposium on Probability & Statistics (Celebrating the Birth Centenary of Prof. H.K Nandi)" held during 27-30 December, 2018.
- Presented Paper in the "Ninth International Triennial Calcutta Symposium on Probability & Statistics" held during 28-31 December, 2015.

- Delivered a Talk in the “International Seminar on Game Theory and its Applications to Social and Economic Networks” held at Dibrugarh University, Dibrugarh, Assam during 10-12 December, 2014.