

E-mail: minervamukherjee@gmail.com

Working as an Assistant Professor in the Department of Mathematics and Statistics in Indian Institute of Technology, Kanpur, since January, 2019.

Education

Postdoctoral Associate at Duke University, NC, USA, Jan,2017-Nov,2018.
Supervisors: Prof. David Dunson and Prof. Sandeep Dave.

Ph.D. in Statistics from Indian Statistical Institute (ISI), 2016.
Supervisor: Prof. Tapas Samanta.

M.Sc. in Statistics, University of Calcutta, 2009 (63.50%).

B.Sc. in Statistics, St. Xavier's College, University of Calcutta, 2007 (73.25%).

Research Interests

Asymptotic Statistics, Bayesian Variable Selection, Nonparametric Inference.

Teaching Experience

- Assistant Professor at Department of Statistics, Bethune College, Kolkata, India for the Bachelors' program in Statistics from September, 2014 till October, 2016.
- Taught two short courses at a workshop on Business Statistics organized by Interdisciplinary Statistical Research Unit, ISI, Kolkata at ISI, Tezpur on December, 2016.
- Taught the graduate course '*STA 611: Introduction to Mathematical Statistics*' in Fall 2017 at Department of Statistical Science, Duke University, USA.

Other Academic Activities

- Visiting Scientist at Interdisciplinary Statistical Research Unit, ISI, Kolkata, India from November, 2016 to December, 2016.
- Project Personnel in Machine Intelligence Unit, ISI, Kolkata in 2009-2010 under the supervision of Prof. C. A. Murthy.

Papers

Published Papers

1. Biswas, M., Mukhopadhyay, M. and Ghosh, A. K. (2014) A distribution-free two sample run test applicable to high-dimensional data. *Biometrika*, **101**(4), 913-926.

2. Mukhopadhyay, M., Samanta, T., Chakrabarti, A. (2015) On consistency and optimality of Bayesian variable selection based on g -prior in normal linear regression models. *Annals of the Institute of Statistical Mathematics*, **67**(5), 963-997.
3. Biswas, M., Mukhopadhyay, M. and Ghosh, A. K. (2015) On some exact distribution-free one-sample tests for high dimension low sample size data. *Statistica Sinica*, **25**, 1421-1435.
4. Mukhopadhyay, M. and Samanta, T. (2017) A mixture of g -priors for variable selection when the number of regressors grows with the sample size. *TEST*, **26**, 377-404.

Papers communicated for publication/working papers

1. Mukhopadhyay, M., and Dutta, S. (2018+) Bayesian variable selection for ultrahigh-dimensional sparse linear models. Available at <http://arxiv.org/abs/1609.06031>.
2. Mukhopadhyay, M., and Dunson, D. (2018+) Targeted random projection for prediction from high-dimensional features. Available at <https://arxiv.org/abs/1712.02445>.
3. Mukhopadhyay, M., and Bhattacharya, S. (2018+) Bayesian non-parametric variable selection using Gaussian processes.

Conferences

- Invited speaker in the session on “*MCMC Algorithms for High Dimensions*” at the conference organized by the IISA, Florida, USA, May, 2018.
- Presented a poster at O’Bayes meeting, UT Austin, USA, December, 2017.
- Participated in poster presentation at ‘International Society for Bayesian Analysis (ISBA) – World Meeting’, Sardinia, Italy, June 2016.
- Participated in ‘Student Paper Competition’ at the conference organized by the International Indian Statistical Association (IISA), Pune, India, December, 2015.
- Invited speaker in the session on “*High-Dimensional Data*” at the International Statistics Conference organized by the Institute of Applied Statistics (IASSL), Colombo, Sri Lanka, December, 2014.
- Contributed speaker at the Joint Statistical Meetings (JSM), Boston, USA, August, 2014.

Awards

1. *Best Student Paper Award in ‘Theory and Methods’ at IISA 2015 Conference.*
2. *Pillar Iglesias Travel Award at ISBA 2016 World Meeting.*
3. *O’Bayes Travel Award at O’Bayes meeting 2017.*

Experience in Statistical Computing

Knowledgeable in C, and an experienced user of R and Matlab. Developed programs relevant to my research work.

Journal Reviews

TEST (An Official Journal of the Spanish Society of Statistics and Operations Research),

JSPI (Journal of Statistical Planning and Inference),

Stat (The ISI's journal for the Rapid Dissemination of Statistical Research).

CSDA (Computational Statistics and Data Analysis)

References:

- Prof. Tapas Samanta; Applied Statistics Unit, Indian Statistical Institute, 203, B. T. Road, Kolkata 700108, INDIA. Tel: +9133 25752829, E-mail : tapas@isical.ac.in.
- Prof. Anil Kumar Ghosh; Theoretical Statistics and Mathematics Unit, Indian Statistical Institute, 203, B. T. Road, Kolkata 700108, INDIA. Tel: +9133 25753434, E-mail : akghosh@isical.ac.in.
- Prof. David Dunson, Department of Statistical Sciences, Duke University, 218 Old Chemistry Bldg, Durham, NC 27708, USA. Tel: +1919 6848025, Email: dunson@duke.edu.
- Dr. Sandeep Dave, Division of Hematologic Malignancies & Cellular Therapy, Department of Medicine, 2163 CIEMAS 101 Science Drive, Box 33821 Durham, NC 27708, USA. Tel : +1919 6811922, Email: sandeep.dave@duke.edu.
- Prof. Arijit Chakrabarti, Applied Statistics Unit, Indian Statistical Institute, 203, B. T. Road, Kolkata 700108, INDIA. Tel: +9133 25752810, Email : arc@isical.ac.in.