Sumanta Adhya
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Education

Ph.D. in Statistics, University of Calcutta, India, 2014.
M.Sc. in Statistics, University of Calcutta, India, 2002.
B.Sc. in Statistics, University of Calcutta (Ramakrishna Mission Residential College, Narendrapur), India, 1999.

Academic Experience

Assistant Professor, Department of Statistics, West Bengal State University, India, February, 2009-present.

Senior Research Fellow, CSIR (India), August, 2006-July, 2008.
Junior Research Fellow, CSIR (India), August, 2003-July, 2006.

Academic Achievements

Gold medalist in M.Sc. in Statistics, Calcutta University 2002.
Qualified for CSIR-UGC Net Fellowship, December, 2002.

Visits

- Visited Math-Stat Unit, ISI, Delhi, August, 2017 for research collaboration.
- Invited to teach in an executive programme on "Quantitative Data Analytics and Its Applications in Business and Marketing" at IIM, Ahmadabad, April 2015 Topics: Application of statistical tools using R programming.
- Visited Math-Stat Unit, ISI, Delhi, August, 2017 for research collaboration, and April, 2014.
- Visited IIM, Ahmedabad, February, 2014 for research collaboration.
- Visiting Research Fellow, Department of Statistics, National University of Singapore, April, 2008.

Research Interests

Finite population inference, Biostatistics, Categorical data analysis, Measurement error / misclassification models, Missing and omitted data, Inference for penalized/regularized estimator, Problems related to big data.

Peer Reviewed Publications

1. Adhya, S., Roy, S. and Banerjee T. (2020). Prediction of finite population proportion when responses are misclassified. *Journal of Survey Statistics and Methodology*, Oxford University Press. (in press, DOI: 10.1093/jssam/smaa027)

2. Adhya, S. and Banerjee, T. (2019). Theoretical comparisons of estimators of finite population proportion under simple random sampling. *Statistics and Applications*, 17, 53-61.

3. Adhya, S. (2018). Bootstrap variance estimation for semiparametric finite population distribution function estimator. *Calcutta Statistical Association Bulletin*, Sage, 70, 17-32.

4. Adhya, S., Bhattacharjee, D, and Banerjee, T. (2018). Design weighted quadratic inference function estimator of superpopulation parameters. In: Chattopadhyay A., Chattopadhyay G. (eds) Statistics and its Applications, PJICAS 2016, Springer Proceedings in Mathematics & Statistics, vol. 244, Springer, Singapore, 155-161.

5. Adhya, S., Banerjee, T., and Chattopadhyay, G. (2014). Finite Population distribution Function Estimation Using P-splines. *Calcutta Statistical Association Bulletin*, Sage, 66, 161-192.

6. Adhya, S., Banerjee, T., and Chattopadhyay, G. (2012). Inference on finite population categorical response: nonparametric regression-based predictive approach. *AStA Advances in Statistical Analysis*, Springer, 96, 69-98.

7. Adhya, S., Banerjee, T., and Chattopadhyay, G. (2011). Inference on polychotomous responses in finite populations. *Scandinavian Journal of Statistics*, John Wiley, 38, 788-800.

Working Papers

1. Bandyopadhyay, T., Adhya, S. and Guha, A. (2015). ROC curve for randomly selected patients.(*IIMA: W.P. No. 2015-07-02, July 2015*).

Papers Under Preparation

1. Chatterjee, Arindam., Bandyopadhyay, Tathagata. and Adhya, Sumanta (2020).
Inference problems in binary regression model with misclassified responses.
2. Chatterjee, Arindam., and Adhya, Sumanta (2020). LASSO-type estimators in finite
population inference.
3. Chakraborty, Surupa., Adhya, Sumanta and Banerjee, Tathagata (2020). Model-
assisted estimators for the finite population proportion estimation for misclassified binary
response.
4. Chatterjee, Arindam. and Adhya. Sumanta (2019). GMM-based inference from
multiple samples with omitted covariates.

Presentation

- Inference on finite population distribution function at the **International Triennial Conference on Statistics & Probability** held at the Department of Statistics, University of Calcutta, India, December, 2012.
- P-spline based estimation of finite population distribution function at Gujarat University, India, February, 2007.
- Estimation of finite population distribution function: Nonparametric Model-based approach at the **International Triennial Conference on Statistics & Probability** held at the Department of Statistics, University of Calcutta, India, December, 2006

Invited Lectures

- "Multivariate Analysis Using R: An Introduction" at **Indian Association for Productivity Quality and Reliability (IAPQR)**, Kolkata, April, 2017.
- "Statistical analysis using R: An Introduction" at the **department of Statistics, Burdwan University, W.B.** , February 2017, and 2016.

Professional Activities

- Member of the Board of directors since 2018, **Calcutta Statistical Association (CSA)**, Department of Statistics, Ballygunge Science College, 35, B.C. Road, Kolkata-19.
- Member, UG Board of Studies (Statistics), **Gaurbanga University,** India, March, 2013-14.
- Member, UG Board of Studies (Statistics), **University of Burdwan**, India, since 2019.

- Life member, **Calcutta Statistical Association (CSA)**, Department of Statistics, Ballygunge Science College, 35, B.C. Road, Kolkata-19.
- Member of Board of Studies for 6-month course on **Data Science** organized jointly by **Indian Association for Productivity, Quality, and Reliability (IAPQR)** and Department of Statistics, WBSU.

Courses taught at the post-graduate level

- Real analysis,
- Probability theory
- Linear algebra
- Parametric inference (Point estimation, interval estimation & Testing of hypotheses)
- Nonparametric inference (Nonparametric testing of hypotheses),
- Large sample theory
- Multivariate statistical analysis
- Advanced Data Analysis
- Advanced Survey sampling.

Conference organization

- Convener of **"One Day International Webinar on Statistics and its Applications"** organized by Department of Statistics, West Bengal State University Jointly with IQAC, WBSU, August 2020.
- **Convener** of **"National Seminar on Probability and Statistics"** at West Bengal State University, March 2016.
- **Member of the Organizing committee: Tenth International Triennial Calcutta Symposium on Probability and Statistics**, December 2018, Department of Statistics, University of Calcutta.
- **Member of the Organizing committee: Platinum Jubilee International Conference on Applications of Statistics**, December 21-23, 2016, Department of Statistics, University of Calcutta.
- **Member of the Organizing committee: Ninth International Triennial Calcutta Symposium on Probability and Statistic**s, December 27-30, 2015, Department of Statistics, University of Calcutta.
- **Member of the Organizing committee: Young Statistician's meet: An International Conference,** December, 2013, University of Burdwan.