

Name: Dr. Tathagata Bandyopadhyay

Designation: Distinguished Professor at Dhirubhai Institute of Information & Communication Technology (DA-IICT) at Gandhinagar, Gujarat

Institute: Dhirubhai Institute of Information & Communication Technology (DA-IICT) at Gandhinagar, Gujarat

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Qualification:

MSc in Statistics from the University of Calcutta.

Ph.D. in Statistics from the University of Calcutta.

ACADEMIC EXPERIENCES

- Distinguished Professor at Dhirubhai Institute of Information & Communication Technology (DA-IICT) at Gandhinagar, Gujarat
- Spent 16 and half years in the Indian Institute of Management Ahmedabad as Professor and also as the Dean (Faculty) for the last few years.
- Spent 21 years in the Department of Statistics, University of Calcutta as a Faculty,
- Visiting Professor in the University of Nebraska, The University of Connecticut, The University of Georgia, Iowa State University, Michigan State University, University of Windsor, National University of Singapore, Umea University, and University of Birmingham.
- Delivered invited talks in various universities in India and Abroad.
- Published more than 50 research articles in journals, besides others in edited volumes and conference proceedings.
- Editor of Calcutta Statistical Association Bulletin Since 2009, and Member of the Editorial Board of Sankhya. He is a life member of the Calcutta Statistical Association, The Indian Association for Productivity Quality and Reliability and The Indian Statistical Institute.

Specialization

- Statistical Inference, Survey Sampling, Discrete Data Modelling and Analysis, Applications of Statistical Methodologies in Various Fields.
- His current research interest is in the statistical aspect of Data Science.

TEACHING EXPERIENCE

- Research Methodology
- Data Analytics
- Bayesian Data Analysis
- Multivariate Analysis
- Regression Analysis
- Nonparametric Data Analysis

Publications

Book: Confidence Intervals for Discrete Data in Clinical Research (Chapman & Hall/CRC Biostatistics Series) Published in November 2021

Selected Journal Articles

- (2021 Forthcoming, With Gaurav Kumar Singh) How informative are quantified survey data? Evidence from RBI household inflation expectations survey, *The Singapore Economic Review*
- (2021 Forthcoming, With Pritha Guha & Apratim Guha) Application of pooled testing in estimating the prevalence of Covid 19, *Health Services and Outcome Research Methodology*
- (2021, With Debjit Sengupta & Surupa Roy) Testing of Poisson mean with under-reported counts, *Brazilian Journal of Probability & Statistics*. 35, 3, pages 523-543.
- (2020, With Debjit Sengupta & Surupa Roy) Estimation of Poisson mean with under-reported counts: A double sampling approach, *Australian & New Zealand Journal of Statistics*. 62, 4, pages 508-535.
- (2020, With Sumanta Adhya & Surupa Roy) Prediction of finite population proportion when responses are misclassified, *Journal of Survey Statistics & Methodology, A journal of American Association for Public Opinion Research*, 61, 3, pages 1-27.
- (2020, With Brij Kothari) Lifelong reading for a billion people, *Stanford Social Innovation Review*, Summer, pages 37-41.
- (2020, With Arindam Chatterjee) Regression models for group testing: Identifiability and asymptotics, *Journal of Statistical Planning and Inference*, 204, pages 141-152.
- (2019, With Surupa Roy) Estimation of log-odds ratio from group testing data using Firth correction, *Biometrical Journal*, 61, 3, pages 714-728.
- (2017, With Kaustab Bandyopadhyay & G. Chattopadhyay) Two stage test of means with unordered pairs, *Statistics in Medicine*, 36, 15, pages 2466-2480.
- (2016, With Arindam Chatterjee & S. Adhya) Pseudo-likelihood and bootstrapped pseudo-likelihood inference in logistic regression model with misclassified responses, <http://arxiv.org/abs/1611.06727>, pages 1-67.
- (2016, With Surupa Roy) Measurement error in astronomy, *Wiley StasRef*, pages 1-12.
- (2014, With Bhaskar Purohit) Beyond job security and money: driving factors of motivation for government doctors in India, *Human Resources for Health*, 12, 12, 1-13.
- (2014, With Avijit Khanra and Chetan Soman) Sensitivity analysis of the newsvendor model, *European Journal of Operational Research*, 239, 2, 403-412.
- (2014, With Brij Kothari) Same Language Subtitling of Bollywood Film Songs on TV: Effects on Literacy, *Information Technologies & International Development*, 10, 4, 31-47.
- (2014, With V. Pradhan, Krishna, Saha & John, C. Evans) Weighted profile likelihood-based confidence interval for the difference between two proportions with paired binomial data, *Statistics in Medicine*, 33, 17, 2984-97.
- (2013, With Arindam Banerjee & Prachi Acharya) Data Analytics: Hyped Up Aspirations or True Potential? *Vikalpa*, 38, 4, 1-11.

- (2013, With V. Pradhan & John, C. Evans) Binomial confidence intervals for testing non-inferiority or superiority: a practitioner's dilemma, *Statistical Methods for Medical Research*, 22, Online Publication, 1-11.
- (2012, With S. Adhya and G. Chattopadhyay) Inference on Finite Population Categorical Response: Nonparametric Regression Based Predictive Approach, *Advances in Statistical Analysis*, 96, 1, 69-98.
- (2011, with S.P. Manimunda, D. Mavalankar & A.P. Sugunan) Chikungunya epidemic-related mortality, *Epidemiology and Infection*, 139, 9, 1410-1412.
- (2011, with S. Adhya and G. Chattopadhyay) Inference on Polychotomous Responses in Finite Population: A Predictive Approach, *Scandinavian Journal of Statistics*, 38, 4, 788-800.
- (2011, with S. Karmarkar and G. Dutta) Revenue impacts of demand unconstraining and accounting for dependency, *Journal of Revenue and Pricing Management*, 10, 367-381.
- (2010, with Brij, Kothari) Can India's literate read? , *International Review of Education*, 56, 5-6, 705-728.
- (2010, with S.R. Paul and U. Balsuriya) Multi-clump Finite Mixture Distribution and Model Selection, *Environmetrics*, 21, 2, 133 -242.
- (2009, with S. Roy) Analysis of Misclassified Correlated Binary Data Using a Multivariate Probit Model When Covariates Are Subject to Measurement Error, *Biometrical Journal*, 51, 3, 420-432.
- (2008, with D. Mavalankar et al.) Increased Mortality Rate Associated with Chikungunya Epidemic, Ahmedabad, India, *Emerging Infectious Disease, CDC USA*, 14, 412-415.
- (2008, With V. Pradhan) Confidence Interval of Two Independent Binomial Proportions Using Weighted Profile Likelihood, *Communications in Statistics-Simulation & Computation*, 37, 4, 645 -659.
- (2008, with R. Mukerjee) Optimal Factorial Experiments for cDNA Microarray Experiments, *Annals of Applied Statistics*, 2,1, 366-385.
- (2007, with R. Mukherjee) A conversation with Shoutir Kishore Chatterjee, *Statistical Science*, 22, 2, 279-290.
- (2007, with M. Chen, D. Dey and S. Kim) Bayesian Analysis of Generalized Odds-Rate Hazards Models for Survival Data, *Lifetime Data Analysis*, 13, 241- 260.
- (2007, with A. Biswas) Nonparametric test for random component in a two-way nested design with mixed effect model, *Annals of the Institute of Statistical Mathematics*, 59, 197-210.
- (2006, with T. Maiti and P. Mukhopadhyay) Classification of Pathological Stages of Prostate Cancer Using Penalized Splines, *Computational Statistics and Data Analysis*, 51, 1147-1155.
- (2006, with S. Roy) A flexible model for generalized linear regression with measurement error, *Annals of the Institute of Statistical Mathematics*, 58, 1531-1569.
- (2005, with Sudhir R. Paul & Uditha Balasooriya) Fisher information matrix of the dirichlet-multinomial distribution, *Biometrical Journal*, 47, 230-236.
- (2005, with S. Roy) Berkson model for binary regression with responses subject to classification errors, *Statistics in Medicine*, 24, 2, 269-283.
- (2003, with A. Biswas) A new formulation of stress-strength reliability in regression set-up, *Journal of Statistical Planning and Inference*, 112, 147-158.
- (2001, with D. Nettleton) Testing the equality of distributions of random vectors with categorical component, *Computational Statistics and Data Analysis* 37, 195-208.

- (1999, with S.R. Paul) An extension of Morel finite mixture distribution for modelling multinomial clustered data, *Biometrika*, 86,723-727.
- (1998, with S.R. Paul) Analysis of two-way layout of count data involving multiple counts in each cell, *Journal of the American Statistical Association*, 93,1419-1429.
- (1991, with Chatterjee, S.K.) Combination of multiple scores for nonparametric testing in Multivariate linear regression set-up, *Communications in Statistics Theory and Methods*,19, 2967-2999.