

Moumita Chatterjee

SQC and OR Unit

Indian Statistical Institute

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RESEARCH INTERESTS

- Data Based Model Building
- Time to Event Data Analysis
 - Survival Analysis
 - Reliability Theory
- Bio Statistics, Industrial Statistics

CURRENT POSITION

- Assistant Professor, SQC and OR Unit at Indian Statistical Institute, Hyderabad Unit, since December 2025.
- Assistant Professor of Statistics at Aliah University, Kolkata (Government of West Bengal), 2015-2025.
- Consultant Statistician, Institute of Pulmocare and Research, kolkata.

PREVIOUS POSITION

- Research Scholar, Department of Statistics, University of Calcutta (2012-2015).
- Teaching Associate at Indian Institute of Management (IIM), Calcutta (2012).
- Lecturer of statistics at Shibpur Dinabandhu Institution College (2010 to 2012).

VISITING POSITION

- Visiting scientist at Vietnam National University, Hanoi, Vietnam in 2018

EDITORIAL RESPONSIBILITY

- Associate Editor, Indian Association of Productivity Quality & Reliability (IAPQR) Transactions Since 2025.

EDUCATION

University of Calcutta

Ph.D.(Statistics)

Completed: May 2018

- Thesis Topic: *Survival Analysis*
- Thesis Title: *A Study of the Survival Functions of Two Alternately Occurring Recurrent Events*
- Advisor: Professor Sugata Sen Roy and Professor Bhaswati Ganguli

University of Calcutta

M.Sc. (Statistics)

Completed: August 2010

Lady Brabourne College

B.Sc. (Statistics)

Completed: July 2008

PROJECT

- Received start up grant (Amount: 5,00,000 INR) from Indian Statistical Institute.
- Have obtained research grant (Amount: 12,11,000 INR) from **SERB, Government of India** as a Principal/Sole Investigator for the period of 2023-2026.
- Have obtained an international grant (Total Amount: 30,000 USD) from **NAFOSTED (National Foundation for Science and Technology Development), Ministry of Science and Technology, Government of Vietnam**, for the period of 2019 - 2022 as a Co-PI.
- Received research grant (Amount: 1,50,000 INR) from Aliah University Research and Development Cell (AURDC)
- Worked in the **UGC** sponsored project E-pathsala and developed e-contents for post-graduation course in Statistics and have recorded 32 videos on the topic of “Advanced R” in 2016.

CORPORATE EXPERIENCE

- In collaboration with **Accenture**, engaged in teaching Statistics to early and mid career corporate employees.

PUBLICATIONS:
CONTRIBUTION
TO STATISTICAL
METHODS AND
THEORY
DEVELOPMENT

1. Rijurekho Chakrabarti, **Moumita Chatterjee** and Sugata Sen Roy, Analyzing the recurrences of inclusion of players in a team sport: A discrete data driven model (2026), **Statistics and Applications**, Accepted for publication.
2. **Moumita Chatterjee**, Bhaswati Ganguli and Sugata Sen Roy, Modelling alternately recurring events using subject specific hazard estimation approach (2024), **Journal of Biopharmaceutical Statistics**, 1–22. Impact factor: 1.1, SCIE, **Q2**. [Link](#)
3. **Moumita Chatterjee**, Bhaswati Ganguli and Sugata Sen Roy, Estimating Subject Specific Hazard Functions (2023), **Journal of Royal Statistical Society, Series C**. Impact factor: 1.864, SCIE, **Q2**. [Link](#)
4. Rudra Prosad Goswami, Bhaswati Ganguli and **Moumita Chatterjee**[†] (2021), Endemic infections, vaccinations and variability of SARS-COV2 worldwide epidemiology: a cross-sectional study, **Journal of Medical Virology**, 93(5):3105-3112. Impact factor: 20.693, SCI, **Q1**. [Link](#). † Corresponding Author
5. Arindam Banerjee*, Rudra Prosad Goswami* and **Moumita Chatterjee*** (2021), Network theoretic analysis of JAK/STAT pathway and extrapolation to drugs and viruses including COVID-19, **Scientific Reports (Nature)**, 11, Article number: 2512. Impact factor: 4.996, SCI, **Q1**. [Link](#)
* All Contributed Equally.
6. **Moumita Chatterjee** and Sugata Sen Roy (2021), Effects of Covariates on alternating recurrent events in Accelerated Failure Time models, **The International Journal of Biostatistics**, Vol 17(2), pp. 295-315. Impact factor: 1.829, SCIE, **Q2**. [Link](#)
7. Rudra Prosad Goswami, Animesh Ray, **Moumita Chatterjee**, Arindam Mukherjee, Geetabali Sircar and Parasar Ghosh, Rituximab in the treatment of systemic sclerosis-related interstitial lung disease: a systematic review and meta-analysis (2020), **Rheumatology**, Vol 60(2), pp. 557-567. Impact factor: 7.046, SCI, **Q1**. [Link](#)
8. **Moumita Chatterjee** and Sugata Sen Roy (2019), A study on the selection pattern of players in any team sport, **Statistica**, Vol 79 (4), pp. 445 - 460. SCOPUS Indexed. [Link](#)
9. **Moumita Chatterjee** and Sugata Sen Roy (2018). A copula-based approach for estimating the survival functions of two alternating recurrent events, **Journal of statistical Computation and Simulation**, Vol. 88, Issue 16, pp. 3098 – 3115. Impact factor: 1.225, SCIE, **Q2**. [Link](#)

10. **Moumita Chatterjee** and Sugata Sen Roy (2018). Estimating the hazard functions of two alternating recurrent events in the presence of covariates, **AStA Advances in Statistical Analysis**, Vol. 102, Issue 2, pp. 289 – 304. Impact factor: 1.281, SCIE, **Q2**. [Link](#)
11. **Moumita Chatterjee**, Jyoti Shaw, Sugata Sen Roy, Anjan Kumar Dasgupta, Bhaswati Ganguli (2016). Review in Nanostatistics- A Measure for Low Level Cellular Perturbations by Nanoparticles and Magnetic Fields Using Cluster Maps, **Nanospectrum: A Current Scenario**, Vol. 1, pp. 1 -18. [Link](#)
12. Sugata Sen Roy and **Moumita Chatterjee** (2015). Estimating the hazard functions of two alternately occurring recurrent events, **Journal of Applied Statistics**, Vol. 42, Issue 7, pp. 1547 – 1555. Impact factor: 1.416, SCIE, **Q2**. [Link](#)

PUBLICATIONS:

COLLABORATIVE
AND APPLIED
PUBLICATIONS

13. Rudra Prosad Goswami, **Moumita Chatterjee** and Shyamashis Das, Defining objective BASDAI cut-offs for disease activity states and improvement scores in axial spondyloarthritis: a multicentric collaboration. (2024), International Journal of Rheumatic Diseases, 27(11). Impact factor: 2.2, SCIE, **Q2**. .
14. Rudra Prosad Goswami, Debanjali Sinha, **Moumita Chatterjee**, Danveer Bhadu, and Shyamashis Das, Comparative Effectiveness of Tofacitinib and Adalimumab in Axial Spondyloarthritis A Real-World Clinical Context Multicenter Study (2024), Journal of Clinical Rheumatology. Impact factor: 3.4, SCIE, **Q2**. [Link](#)
15. Arkaprova Chakraborty, Ayan Mazumder and **Moumita Chatterjee**, Quantifying the Volatility of Stock Price Changes in the Indian Market Using the Moving Average Envelope and Bollinger Bands (2024), Institutions and Economies, 16(2): 30-56. Impact factor: 0.61, SCOPUS Indexed, **Q3**. [Link](#)
16. Parthasarathi Bhattacharyya, Dipanjan Saha, **Moumita Chatterjee**, Sayoni Sengupta, Debkanya Dey, Rajat Banerjee (2023), COPD and glycopyrronium responsiveness assessment: An appraisal, Lung India, 40(3): 227-34. Impact factor: 0.36, SCOPUS Indexed. **Q3** [Link](#)
17. Parthasarathi Bhattacharyya, Sikta Mukherjee, **Moumita Chatterjee**, Dipanjan Saha, Sayoni Sengupta, Debkanya Dey (2023), The impact of lockdown on symptoms and health status of patients with chronic airway diseases: An appraisal of patient perceived impressions, Lung India, 40:128-33. Impact factor: 0.36, SCOPUS Indexed. **Q3** [Link](#)

18. Rudra Prosad Goswami, Soumendra Nath Haldar, **Moumita Chatterjee**, Pallavi Vij, Anneke J.van der Kooi, Johan Lim, Joost Raaphorst, Danveer Bhadu, Chiara Gelardi, Maria Giovanna Danieli, Uma Kumar (2022), Efficacy and safety of intravenous and subcutaneous immunoglobulin therapy in idiopathic inflammatory myopathy: A systematic review and meta-analysis, *Autoimmunity Reviews*, 21(2). Impact factor: 17.39, SCI, **Q1**. [Link](#)
19. Saloni Haldule, **Moumita Chatterjee**, Rudra Prosad Goswami, Innara Vadsaria, Prithvi Gaur, Chengappa Kavadihanda, Durga Prasanna Misra, Hector Chinoy, Vikas Agarwal, Rohit Aggarwal, Latika Gupta (2022), A systematic review and meta-analysis of Mycobacterial infections in patients with idiopathic inflammatory myopathies, *Rheumatology*, 30;61(9):3521-3533. Impact factor: 7.046, SCI, **Q1**. [Link](#)
20. Lich Khac Hoang, **Moumita Chatterjee**, Kien The Nguyen and Duong Anh Nguyen (2021), Classifying countries in terms of Government expenditure: A multi criteria approach, *HSE Economic Journal*, 25(4): 610–627. Impact factor: 0.74, SCOPUS Indexed, **Q3**. [Link](#)
21. Susmita Roy, Nitish Mondal, **Moumita Chatterjee** and Jaydip Sen (2021), Knowledge, Awareness and Attitudes Related to HIV/AIDS Among Urban and Rural Married Women Belonging to an Ethnic Population of India, *Online Journal of Health and Allied Sciences*, 20(3):4. Impact factor: 0.11, SCOPUS Indexed, **Q4**. [Link](#)
22. Rudrani Chatterjee, **Moumita Chatterjee**, Rudra Prosad Goswami, Kaushik Basu, Uma Kumar and Parasar Ghosh (2021), Depression, anxiety and suicidality among patients with psoriatic arthritis: a systematic review and meta-analysis, *European Journal of Rheumatology*.
23. Rudra Prosad Goswami, Hiranmanik Sit, **Moumita Chatterjee**, Debasish Lahiri, Geetabali Sircar and Parasar Ghosh (2020), High-resolution ultrasonography in carpal tunnel syndrome: role of ancillary criteria in diagnosis and response to steroid injection, *Clinical Rheumatology*, Vol 40, pp. 1069-1076. Impact factor: 3.650, SCI, **Q1**. [Link](#)

SCHOLARSHIPS,
AWARDS AND
FUNDING
RECEIVED
(RESEARCH
FELLOWSHIPS
AND AWARDS)

- Have received National Scholarships in 10th standard 2003
- Have been rewarded with high grades in several Science Talent & Mathematical Talent Search examinations in School level
- Have received the “Best student of statistics” award from Lady Brabourne College 2006
- Have successfully cleared “Indian Statistical Service” conducted by Union Public Service Commission 2009
- Qualified National Eligibility Test (NET) for “Mathematical Sciences” conducted by Council of Scientific and Industrial Research (CSIR) 2011
- Awarded with fellowship provided by UGC for conducting research 2012
- Have Secured 3rd position in the Young Statistician Seminar (Bose-Nandi Award competition) organized by Calcutta Statistical Association 2017
- Have obtained an international grant (Amount: 30,000 USD) from NAFOSTED (National Foundation for Science and Technology Development), Ministry of Science and Technology, Government of Vietnam 2019 - 2022.
- Have won Professor T.S.K. Moothathu Young Statistician Award (1st position) at ICSTC 2019, supported by American Statistical Association (Judged based on Thesis submitted during 2017 and 2018 in India) 2019
- Received financial support from the ISCB Conference Fund for Developing Countries (CFDC) to participate in the International Society for Clinical Biostatistics Conference 2021 (ISCB42) 2021
- Have obtained a grant (Amount: 1211468 INR) from SERB, Government of India as a Principal/Sole Investigator for the period of 2023-2026. This is affiliated to ”Swasth Bharat” Yojana that is earmarked to improve Indian Public Health System.

(Travel Grant)

- Selected for the international travel grant by CSIR to attend 7th International Conference and Expo on Metabolomics, USA during Nov 14, 2016 to Nov 16, 2016. 2016.
- Have been rewarded with Travel Grant for attending “ConsPic: 2017” by Indian Association for Statistics in Clinical Trials (IASCT), held in Chennai, India 2017
- Have been selected to receive financial support from the ISCB Conference Fund for Developing Countries (CFDC) to participate in the International Society for Clinical Biostatistics Conference 2020 (ISCB41). 2020

PHD AND
MASTERS
STUDENTS

PhD Students

- Mr. Rijurekho Chakrabarti, Expected to submit by 2026.

Master degree Students

- Have advised 32 students towards completion of their master degree project work in Statistics, Biological Sciences and Mathematics and 3 students for undergraduate project work in Statistics
- 2 undergraduate and 2 post graduate students are doing internships with me

TEACHING
EXPERIENCE

- Assistant Professor at Aliah University, Kolkata
(Taught the following subjects in several B.Sc. and M.Sc. courses.)
 - Reliability Theory
 - Survival Analysis
 - Regression Analysis
 - Basic Statistics
 - Vital Statistics
 - Linear Models
 - Generalized Linear Models
 - Econometrics
 - Statistical simulation
- Conducted several workshops in India, Nepal and Vietnam to teach the following topics:
 - **Basic Biostatistics and Biostatistics using R**
 - Audience: Clinical Doctors and Healthcare professionals at Kathmandu University School of Medical Sciences, Nepal.
 - Several Biological Sciences Departments at Indian universities.

– **Statistical Tools for Data Science**

Audience: Students and researchers from Department of Computer science and Engineering, Jadavpur University

– **Basic Econometrics with an application using R**

Audience: Researchers from University of Economics and Business, Hanoi.
Department of Economics, Jadavpur University

– **Basic Statistics using R**

Audience: Department of Mathematics, Jadavpur University

**SOFTWARE
SKILLS**

- R
- RStudio (with emphasis on Bioconductor, igraph and other specialized packages Packages)
- MSExcel
- SPSS
- General: C, Latex

SERVICE

- Acted as a member of inter university research group with the aim of using data science to COVID-19 special research group understand the progression of the COVID-19 pandemic. Analyses and case studies available a <https://www.covidpandemic2020.in/> (2020-2021)
- Acting as a “Board of Studies” member of “Behala College (Autonomous)” and helped to prepare the undergraduate Statistics Hons. Syllabus from 2025
- Organized a Webinar on ”Celebrating the Birth Centenary of Prof. C.R.Rao” on September 10, 2020
- Acted as a “Board of Studies” member of “Kazi Nazrul University, Asansol” and helped to prepare the undergraduate Statistics Hons. Syllabus from 2016 to 2018
- Acting as a member of the “Ethics Committee” of “Institute of Pulmocare & Research, Kolkata”
- Acted as “Examination Committee Member” at Aliah University, Kolkata from 2018-19 to 2019-20
- Acted as ” Aliah University Admission Test (AUAT 2021)” core committee member
- Acted as Hostel Management Committee member of Alaih University from 2019-20 to 2020-21.

- Acted as a Assistant Supervisor for conducting “West Bengal Civil Services (WBCS)” at Aliah University, Kolkata.
- Have reviewed several papers for national and international journals (Biometrics, Scientific Reports, Communications in Statistics, IAPQR Transactions, CSA Bulletin, Journal of Applied Statistics, Annals of Operation Research, Journal of Statistical Computation and Simulation and others).

CONFERENCE
TALKS AND
PRESENTATIONS

- Presented a paper in the seminar on “statistical applications in nanotechnology” organized by University of Calcutta December 2013
- Presented a paper in the National Conference on “Inference for Stochastic Process-Recent Trends and Ideas” (NCISPRTI 2014), organized by Visva- Bharati University February 2014
- Presented a paper in the two day “Research Scholars’ Meet”, 2014, Organized by ISI, Kolkata February 2014
- Delivered several guest lectures at Amity University, Kolkata September to December 2015
- Invited series of lectures during the course work for the Phd students of “West Bengal State University” in the Department of Statistics and the Department of Anthropology July 2016
- Presented a paper in the “Workshop on Reliability Theory and Survival Analysis”, Organized by ISI, Kolkata November 2017
- Invited lecture on “The applications of statistics on economic analysis” at Vietnam National University, Hanoi, Vietnam March 2018
- Invited to conduct a workshop for the Post Graduate medical students at Kathmandu University School of Medical Sciences, Dhulikhel, Nepal funded by National Heart, Lung, and Blood Institute, USA. November 2018
- Invited to deliver a lecture on “Survival Analysis”

in the Department of Statistics,
Tribhuvan University, Nepal

November 2018

- Presented a paper in the
“Tenth International Triennial Calcutta Symposium”,
Jointly organized by Calcutta Statistical Association
and University of Calcutta December 2018
- Invited to conduct a workshop on
“An Introduction to R” for the
Post Graduate and Research students at
Department of Economics, Jadavpur University March 2019
- Invited to conduct a workshop on
“An Introduction to R” for the
Under Graduate and Post Graduate students of Mathematics,
at Pingla Thana Mahavidyalaya August 2019
- Presented a paper in “ICSTC2019”, organized by
Department of Statistics, University of Kerala November 2019
- Presented a paper in a two day international seminar on
“Sustainable Development and Inclusive Growth:
Methods to Methodology”, sponsored by
The Department of Higher Education,
Govt. of West Bengal and organized by
Lady Brabourne College March 2020
- Presented a paper in “ISCB2020”, organized by
International Society for Clinical Biostatisticians August 2020
- Invited lecture in “LISA2020” on health analytics
organized by LISA 2020, jointly sponsored by the University of Colorado
at Boulder. December 2020
- Invited to act as a resource person in a refresher course to deliver lecture
on “Data Science and it’s Applications” organized by the Department
of Computer Science and Engineering, Jadavpur University February
2021
- Presented a paper in “ISCB2021”, organized by
International Society for Clinical Biostatisticians July 2021
- Invited to present a paper in “International Symposium on Probability
and Statistics: New Frontiers”, Celebrating 75 years of Calcutta Statistical

Association, organized jointly by
Calcutta Statistical Association and Department of Statistics, University
of Calcutta August 2022

- Invited to deliver a series of lectures on
"R Programming and its applications" at the Department of Mathematics,
Jadavpur University. June 2023
- Invited lecture in "Emerging Trends of Statistical Sciences in New
Era – 2024 (ETSSNE-2024)" at the Department of Statistics, Manipur
University, Imphal February 2024
- Invited lecture in "Advances of Interdisciplinary Statistics and Applications
in AI and ML – 2025 (AISAAM-2025)" at the Department of Statistics,
North Eastern Hill University, Shillong February 2025
- Invited to give lecture in "Retreat for Women in Applied Mathematics -
Southeast Asia 2025 (RWAM-SE2025)" at Vietnam Institute of Advanced
Study in Mathematics (VIASM), Hanoi, Vietnam September 2025
- Invited to conduct workshop in "Meeting the Challenges in learning
Biostatistics by clinicians and medical students" at PULMOCON 2025
September 2025
- Invited lecture on "Introduction to R" at the two days National Workshop
organized by Derozio Memorial College, Kolkata December 2025
- Invited lecture on "Analyzing the dependence structures between alternating
recurrent events" at Conference on Data driven Statistical Decision
Making at the Department of Mathematics, IIT Hyderabad March,
2026
- Invited as a panelist on "How Statistics can help you to build your
future" at the Department of Mathematics, IIT Hyderabad March,
2026
- Invited as a resource person for Short Term Training Program on "Exploring
Research Opportunities and Impactful Research" organized by L D
College of Engineering Ahmedabad, held during May 04 to May 08,
2026.
- Invited lecture on "Discrete time to event data analysis" at Eleventh
Hybrid International conference on "Recent Trends in Statistical theory
and Applications (WSTA(2026))", organized by the Department of
Statistics, University of Kerala during July 02 to 05, 2026.