

Curriculum Vitae

Dr. Ayan Pal

Assistant Professor
Department of Statistics
The University of Burdwan, Golapbag, Bardhaman - 713104,
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CONTACT DETAILS

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EDUCATION

- Ph.D. in Statistics in 2021 from Indian Institute of Technology, Kanpur
- M.Sc. in Statistics in 2015 from Indian Institute of Technology, Kanpur
- B.Sc. (Hons in Statistics) in 2013 from Ramakrishna Mission Residential College, Narendrapur, University of Calcutta

EMPLOYMENT DETAILS

- Assistant Professor (Stage-II) in Statistics at The University of Burdwan, West Bengal, India. from March 23, 2024 to present.
- Assistant Professor (Stage-I) in Statistics at The University of Burdwan, West Bengal, India. from March 23, 2020 -March 22, 2024.

EXPERIENCE AS TEACHING ASSISTANT

NPTEL Online Certification course:

- Jan-Feb 2017: **Linear Regression Analysis And Forecasting**, IIT Kanpur.
- Jul-Sept 2017, Aug-Sept 2018: **Introduction to R Software**, IIT Kanpur.
- Feb-Apr 2019: **Descriptive Statistics with R Software**, IIT Kanpur.

PG COURSES TAUGHT

- MSST104 : **Optimization Techniques & Statistical Quality Management**
- MSST105 : **R Programming**
- MSST204 : **Reliability Theory**
- MSST302 : **Regression Analysis**
- MSST305 : **Advanced Statistical Methods**
- MSST404 : **Biostatistics (Special II): Statistical Genetics**

MEMBERSHIP IN ACADEMIC BODIES

- Member of the Equal Opportunity Cell, The University of Burdwan constituted by Hon'ble Vice Chancellor (2023 onwards).
- Member of the Board of Research Studies in Statistics, The University of Burdwan nominated by Hon'ble Vice Chancellor(2023 onwards).
- Member of the Board of P.G. Studies in Statistics, The University of Burdwan (2021 onwards).

RESEARCH INTERESTS

- Step-stress model.
- Cure rate model.
- Lifetime Data Analysis.
- Competing risks.
- Degradation Models

LIST OF ACCEPTED
ARTICLES

- **Pal A.**, Mitra S., Kundu D.(2021) “Order restricted Classical Inference of A Weibull Multiple Step-Stress Model”. *Journal of Applied Statistics*, 48:4, 623-645, DOI:<https://doi.org/10.1080/02664763.2020.1736526>.
- **Pal, A.**, Mondal, S., Kundu, D. (2021), “ A Cure Rate Model for Exponentially Distributed Lifetimes with Competing Risks.” *Journal of Statistical Theory and Practice*,, vol. 15, no.1, Paper no.21. DOI:<https://doi.org/10.1007/s42519-020-00145-0>.
- **Pal A.**, Mitra, S., Kundu, D. (2021), “ Bayesian Order Restricted Inference of A Weibull Multi-step Step-Stress Model.” *Journal of Statistical Theory and Practice*, vol.15,no.1,Paper no.44. DOI: <https://doi.org/10.1007/s42519-020-00164-x>.
- Sultana, F., Koley, A., **Pal, A.**, Kundu, D.,(2022), “On Two Exponential Populations Under A Joint Adaptive Type-II Progressive Censoring.” *Statistics*, 55:6, 1328 - 1355, DOI:<https://doi.org/10.1080/02331888.2021.2024543>
- **Pal A.**, Prajapati, D. (2023), “Mixture Model for Dependent Competing Risks Data and Application for Diabetic Retinopathy Treatment.” *Applied Mathematical Modelling*, 113, 514-527, DOI: <https://doi.org/10.1016/j.apm.2022.09.003>
- Prajapati, D., Mitra S., Kundu, D., **Pal A.** (2022), “Optimal Bayesian Sampling Plan for Censored Competing Risks Data.” *Journal of Statistical Computation and Simulation*, 93, 775-799, DOI: <https://doi.org/10.1080/00949655.2022.2120993>
- **Pal A.**, Samanta D., Kundu, D. (2023), “Cure Rate Based Step-Stress Model.” *Journal of Statistical Theory and Practice*, Vol. 17, Article No. 15, DOI: <https://doi.org/10.1007/s42519-022-00313-4>
- **Pal A.**, Mitra S., Kundu D.(2023) “Order Restricted Inference for a Multiple Step-Stress Model with Long-term Survivors for a General Family of Distributions”. *Applied Stochastic Models in Business and Industry*, 39, 426-446, DOI: <https://doi.org/10.1002/asmb.2754>
- Prajapati, D., **Pal A.**, Kundu D.(2024) “A Finite Mixture Model for Multiple Dependent Competing Risks with Applications of Automotive Warranty Claims Data”. *Statistics and Computing*, vol. 34, Article no. 19, DOI:<https://doi.org/10.1007/s11222-023-10326-z>
- Ali Khan, R., **Pal A.**, Kundu D.(2024) “Testing the Goodness-of-fit of the Stable Distributions with applications to German Stock Index data and Bitcoin cryptocurrency data”. *Statistics and Computing*, vol. 34, Article no. 128, DOI: <https://doi.org/10.1007/s11222-024-10441-5>
- **Pal A.**, Samanta, D., Kundu, D. (2024), “A Semiparametric Approach for Simple Step-Stress Model,” *TEST*, (To appear).
- Mukhopadhyay, S.S., **Pal A.**, Gijo, E. V. (2025), “Analysis of Multiple Step-Stress Dependent Competing Risks under Proportional Hazard Model,” *Quality Technology & Quantitative Management*, (To appear).

BOOK CHAPTERS

- **Pal, A.**, Samanta, D., Mitra, S., Kundu, D. (2021), “A Simple Step-Stress Model for Lehmann Family of Distributions”. *Advances in Statistics-Theory and Applications: Emerging Topics in Statistics and Biostatistics*, Eds. Indranil Ghosh, Hon Keung Tony Ng and N. Balakrishnan, Springer, Cham. DOI: https://doi.org/10.1007/978-3-030-62900-7_16

ACCOMPLISHMENT

- **Outstanding PhD Thesis Award** from the Department of Mathematics & Statistics, IIT Kanpur, 2021.
- Award of **JUNIOR RESEARCH FELLOWSHIP** and secured rank **045/0537** in the subject **Mathematical Sciences** in the **Joint CSIR-UGC NET** exam held in June, 2016.
- **“INSPIRE SCHOLARSHIP”**, Dept. of Science & Technology (DST), Govt. of India during Bachelor’s and Master’s degree in Statistics (2010-2015).
- Qualified **SET** Examination, 2015 in **Mathematical Sciences** organized by **WBCSC**.
- Secured **AIR-201** and qualified **GATE Examination**, 2015 in **Mathematical Sciences**.
- Secured **AIR-27** and qualified **Joint Admission Test for M.Sc. (JAM)** in 2013 among all Statistics students at all India level.
- **Smt Shanta Bala Devi Memorial prize** for securing **First class (Fourth position)** in Statistics Hons in the Degree Examinations, 2013 from Ramakrishna Mission Residential College, Narendrapur, Kolkata, West Bengal.
- “Certificate of Excellence” for securing Second Position for delivering commendable seminar lecture, 2012 at the Statistics Department, Ramakrishna Mission Residential College, Narendrapur, Kolkata, West Bengal.

SPEAKER IN CONFERENCES /WORKSHOPS/ SEMINARS

- Attended International Workshop on Bayesian Frontiers: Unveiling the Future of Statistical Modeling and Inference, Department of Statistics, DST-Centre for Interdisciplinary Mathematical Sciences and Mahila Mahavidyalaya, Banaras Hindu University, India during January 03-05, 2025.
- (Invited speaker) Eleventh International Calcutta Triennial Symposium On Probability & Statistics, Department of Statistics, University of Calcutta, India during December 27-30, 2024.
- (Invited speaker) International Conference on Statistics, Probability, Data Science and Related Areas, held during 04th - 06th January 2023, organized jointly by Department of Statistics, Cochin University of Science and Technology & Indian Society for Probability and Statistics.
- International Virtual Conference on Advanced Statistical Techniques in Business and Industry, A Regional Virtual Conference of International Society for Business and Industrial Statistics (ISBIS), organized by Department of Statistics, Cochin University of Science & Technology, Kerala, India during 28 -30 December 2020.
- National Workshop on Reliability Theory and Survival Analysis held at Department of Statistics, Ramanujan School of Mathematical Sciences, Pondicherry University during 11-13 December, 2019.
- Students’ Research Convention ’19, 30-31 March, 2019 at IIT Kanpur.
- Annual Departmental Open House, Department of Mathematics and Statistics, Indian Institute of Technology, Kanpur on 19 th January 2019.
- Tenth International Calcutta Triennial Symposium On Probability & Statistics, Department of Statistics, University of Calcutta, India during December 27-30, 2018.
- International Conference on Mathematics and its Applications(ICMA, 2018), The University of Burdwan during 15-17 February, 2018.
- Workshop on Reliability Theory and Survival Analysis, Indian Statistical Institute, Kolkata during 20-22 November, 2017.

- Annual Departmental Open House, Department of Mathematics and Statistics, Indian Institute of Technology, Kanpur on 18 th February 2017.

CHAIRING/ORGANIZING SESSION	<ul style="list-style-type: none"> • Session Chair of the Session : Inventory Models at the International Conference on Statistics, Probability, Data Science and Related Areas, held during 04th - 06th January 2023, organized jointly by the Department of Statistics, Cochin University of Science and Technology & Indian Society for Probability and Statistics.
DEPARTMENTAL ROLES	<ul style="list-style-type: none"> • Point of Contact (POC) for the Department of Statistics, BU from March 17, 2021 onwards. The main function is to perform all the necessary works related to the Departmental information based on the cooperation of all the faculty members and to maintain all possible relations to all other Departments for sharing the information of the Department.
SKILLS	<ul style="list-style-type: none"> • R • L^AT_EX
REFEREE SERVICE	<ul style="list-style-type: none"> • Reliability Engineering & System Safety • Communications in Statistics - Theory and Methods • Journal of the Indian Society for Probability and Statistics • Computational Statistics • OPSEARCH
MEMBERSHIP IN SCIENTIFIC SOCIETIES	<ul style="list-style-type: none"> • Indian Society of Probability and Statistics (Life Member). • Calcutta Statistical Association (Life Member)

****Last updated on
May 19, 2025**