

# Dr. Raj Kamal Maurya

Assistant Professor Applied Mathematics and Humanities Department Sardar Vallabhbhai National Institute of Technology Surat, Gujarat, India- 395007. E-mail: rkm@amhd.svnit.ac.in, rkmiitp90@gmail.com. Contact: +91-7761897529, +91-9454803998. Date of Birth: 11th July, 1990.

#### Board/University/Institute Degree Year of Percentage of Marks/CPI Passing Ph.D. IIT Patna 2019 IIT Patna M.Tech.(Maths and 20158.71 Computing) MSc (Mathematics) University of Allahabad 2012 62.90University of Allahabad BSc (Maths, Stats 2010 63.44and Physics) Uttar Pradesh Board Higher Secondary 2007 67.00Secondary Uttar Pradesh Board 200574.00

## Educational Background

## **Research Experience:**

## 1. Doctral Dissertation (2015-2019)

- My thesis work has been focused on "Some Problems of Estimation and Prediction under Progressive Censoring".
- Keywords: Maximum likelihood estimation (MLE); Expectation maximization Algorithm (EM); Bootstrap-Confidence Interval; Lindley Approximation Method; Markov chain Monte Carlo (MCMC); Highest Posterior Density Interval (HPD); One Sample and Two Sample Prediction; Optimality.
- Supervisor: Dr. Yogesh Mani Tripathi (Dept. of Mathematics, IIT Patna)

### 2. Master Dissertation (2014-2015)

- Worked on "Parameter Estimation for a Burr Distribution Using Progressive Censoring".
- This work is published in "American Journal of Mathematical and Management Sciences".
- Supervisor: Dr. Yogesh Mani Tripathi (Dept. of Mathematics, IIT Patna)

- 3. Master's Mini Project (Jan'14 2014 Apr'10 2014)
- Analysis of Savings Data in Advanced Multivariate Statistics.
- Advisor: Dr. Jayanta Pal (Dept. of Mathematics, IIT Patna)

#### 4. Major Research Area

- Reliability Theory and Survival Analysis
- Censoring
- Competing Risk
- Optimum Plan

#### **Technical Skills**

- R
- MATLAB
- MS OFFICE
- ĿAT<sub>E</sub>X

#### Honors Accorded

- Qualified GATE in Mathematics-2013 with AIR-395.
- Secured first position in Secondary and Higher Secondary at school level.

#### **Publications in Peer Reviewed Journals**

- R. K. Maurya, Y. M. Tripathi, M. K. Rastogi, and A. Asgharzadeh, Parameter Estimation for a Burr XII Distribution under Progressive Censoring, *American Journal of Mathematical* and Management Sciences, Vol. 36, no. 3, pp. 259-276, 2017.
- R. K. Maurya, Y. M. Tripathi, and M. K. Rastogi, "Transmuted Burr XII Distribution," Journal of the Indian Society for Probability and Statistics, vol. 18, no. 2, pp. 177-193. 2017.
- S. Dey, M. Nassar, R. K. Maurya, and Y. M. Tripathi, "Estimation and prediction of Marshall–Olkin extended exponential distribution under progressively type-II censored data," *Journal of Statistical Computation and Simulation*, Vol. 88, no. 12, pp. 2287-2308, 2018.
- R. K. Maurya, Y. M. Tripathi, T. Sen, and M. K. Rastogi, "On Progressively Censored Inverted Exponentiated Rayleigh Distribution," *Journal of Statistical Computation and Simulation*, Vol. 89, no. 3, pp. 492-518, 2019.
- R. K. Maurya, Y. M. Tripathi, T. Sen, and M. K. Rastogi, "Inference for an Inverted Exponentiated Pareto Distribution Under Progressive Censoring," *Journal of Statistical Theory and Practice*, Vol. 13, no. 1, pp. 2, 2019.

- R. K. Maurya, Y. M. Tripathi, and M. K. Rastogi, "Estimation and p Rayleigh distribution," Journal of Statistical Theory and Practice, Vol. 13, no. 3, pp. 39, 2019.
- R. K. Maurya, Y. M. Tripathi, C. Lodhi, and M. K. Rastogi, "On a Generalized Lomax distribution", *International Journal of System Assurance Engineering and Management*, Vol. 10, no. 5, pp. 1091-1104, 2019.
- R. K. Maurya and Y. M. Tripathi, "Reliability estimation in a multicomponent stressstrength model for Burr XII distribution under progressive censoring," *Brazilian Journal of Probability and Statistics*, Vol. 34, no. 2, pp. 345-369,2020.

#### **Conferences** / Seminar / Poster Presentation

- Attended an International Workshop on Reliability Theory and Survival Analysis, Indian Statistical Institute, Kolkata, 20-22 November, 2017.
- Paper presented title "On a transmuted burr XII Distribution" in the international workshop organized by the Department of Statistics and Centre for Advanced studies, Savitribai Phule Pune University, 3-5 November, 2016.
- Paper presented title "Parameter Estimation for a Burr distribution under Progressive Censored Data" in International Conference on Recent Advances in Mathematics, Statistics and Computer Science, Central University of South Bihar, India, 29-31 May, 2015.
- Attended Workshop on Statistical Genomics and Genetics CR Rao AIMSCS, University of Hyderabad 26th to 30th December, 2015.
- Attended Workshop on A Panoply of Statistical Genetics and Data Mining- Density with R, CR Rao AIMSCS, University of Hyderabad, 26th to 29th July, 2016.
- Attended Workshop on Indian Statistical Institute SQC and OR Unit, Bangalore, Workshop on Reliability Theory and Survival Analysis, 28th to 30th November, 2018.
- Symposium on Modeling and Computation April 9, 2016, Indian Institute of Technology Patna.
- 8. Poster Presentation on Research Scholar Day, March 2017, IIT Patna.

#### **Teaching Assistant**

I have taken following tutorial classes at IIT Patna, India

• Complex Analysis and Differential Equation (MA102), B.Tech. (2nd year, 4th semester), in

Autmn 2015.

• Probability Theory and Random Processes (MA225), B.Tech. (2nd year, 4th semester) in Spring, 2016.

• Simulation lab, M.Tech. in Mathematics and Computing (1st year, 2nd semester) in Autumn 2018.

## **Teaching Experience**

I worked as assistant professor at KIIT, Bhubaneswar from 17th June, 2019 to 28th April, 2021. I have taken the following courses at KIIT Bhubaneswar

- Probability and Statistics
- Math-I
- Math-II

## **Extracurricular Activities**

- 1. Students of Gymkhana member contributed as member of Mess Secretary at IIT Patna for the session 2016-2017.
- 2. Students Gymkhana member contributed as Maintenance Secretary at IIT Patna for the session 2017-2018.

#### **Hobbies**

- Listening Music
- Playing Cricket
- Reading Books

#### Declaration

I hereby declare that all the details furnished above are true to the best of my knowledge.