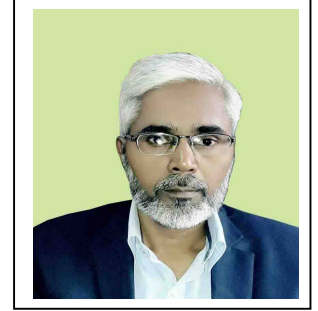


## ***CURRICULUM VITAE***

***Dr. Nesar Ahmad*** Ph.D. (Statistics)  
(Professor, University Dept of Statistics & Computer Applications)  
(Director, UDCA, Computer Center)



**Father's Name** : Late Abdul Majeed  
**Date of Birth** : 26-05-1964  
**Marital Status** : Married  
**Sex** : Male  
**Nationality** : Indian  
**Address for Correspondence** : Head, University Department of Statistics &  
Computer Applications,  
T.M. Bhagalpur University,  
Bhagalpur-812007, India  
**Phone Nos.** : +91-6412501290 (O); +91-9472149270 (Mob)  
**E-mail** : [nesar\\_bgp@yahoo.co.in](mailto:nesar_bgp@yahoo.co.in); [ahmad\\_n@tmbuniv.ac.in](mailto:ahmad_n@tmbuniv.ac.in);

**Qualifications:** B. Sc (Maths Hons) in 1984 from Bihar University, Muzaffarpur; M. Sc, M. Phil, Ph.D. in Statistics, in 1987, 1990 and 1993 respectively from A.M.U., Aligarh.

**Teaching/research Experience:** **Twenty Five Years**

**Publications:** Seventy Two publications, for more detail please see **Annexure**

**Topic of M.Phil. Dissertation:** *Bayesian and Accelerated Reliability Analysis.*

**Topic of Ph.D. Thesis:** *Optimal Accelerated Life Test Designs.* (<http://hdl.handle.net/10603/51745>)

**Area of Interest:** Reliability Theory, Life Testing, Software Reliability Engineering, Software Testing, Software Failure Data Analysis and Optimization.

### **Computer Proficiency:**

- Language known : Fortran, Basic, and Pascal (Programming course, AMU, Aligarh)
- Software known : R-programming, Minitab, SPSS, Excel, STATISTICA.

### **Membership of Learned Societies:**

- Indian Society of Information Theory and Its Applications (ISITA)
- Bihar Journal of Mathematical Society.
- Indian Science Congress
- Aligarh Statistical Association

### **Editorial Board Member of Journals:**

- Journal of Convergence Information Technology (JCIT).
- International Journal of Scientific and Statistical Computing (IJSSC).

### **Referee Services:**

- IEEE Transactions on Reliability.
- Journal of Applied Statistics
- Quality and Reliability Engineering International
- Journal of Testing and Evaluation (USA).
- Applied Mathematical Modelling (Elsevier Journal).
- International Journal of Quality and Reliability Management (UK).
- Journal of Applied Mathematics & Computing (Springer Journal).
- Statistical Methodology (Elsevier Journal).
- International Journal of Modelling and Simulation (Canada).
- South Pacific Journal of Natural Science (USP)
- Journal of Mathematics & Statistics
- Journal of Statistics Applications and Probability (JSAP).
- Journal of Convergence Information Technology (JCIT)
- Punjab University Journal of Mathematics (Pakistan).
- Indian Journal of Mathematics.
- Caledonian Journal of Engineering

### **Courses Taught:**

- **Post Graduate Levels:** Design and Analysis of Experiments, Probability Theory, Sampling Techniques, Real Analysis, Distribution Theory, Statistical Inference, C++ Programming, Statistical Computing using SPSS & R
- **Undergraduate Levels:** Basic Statistics and Introduction to Statistics (with Excel and Minitab), Probability Theory, Mathematical Statistics, Statistical Inference, Stochastic Process, Reliability Theory, Sampling Techniques and Design of Experiments

### **Awards:**

- Post-Doctoral Research Associate ship (CSIR, New Delhi) 1995 -1996.
- University Research Fellowship 1991-1993.

### **Training Program/Courses attended:**

- Training of Trainers for Faculties from Universities during 27-31 December, 2010, at National Academy of Statistical Administration (NASA), Ministry of Statistics and Programme Implementation, Greater Noida.
- Workshop on 'Assessment in Moodle' held on November 20, 2008 at USP, Fiji.
- Workshop on 'Moodle Managing and Monitoring Learning Achievement' held on November 21, 2008 at USP, Fiji.
- Workshop on 'Moodle Online Learning and Teaching' held on February 14, 2008 at USP.
- Workshop on 'Methods to Improve Teaching' held on April 18, 2008 at USP, Fiji.
- Refresher course in the Statistics and Operations Research from 21-12-2004 to 12-01-2005, Academic Staff College, A. M. U., Aligarh, India.
- Refresher course in the Computer Applications (Interdisciplinary) from 10-04-2002 to 2-05-2002, Academic Staff College, A. M. U., Aligarh, India.
- Orientation course (General) from 26-11-1998 to 19-12-1998, Academic Staff College, A. M. U., Aligarh, India.

### **Professional Activities:**

- Head of the Department, University Department of Statistics & Computer Applications, T.M. Bhagalpur University: 01 January, 2020 to till date.
- Course Coordinator/Director, University Department of Computer Applications, Computer Centre, T.M. Bhagalpur University: January 1, 2017 to January 11, 2019.
- Head of the Department, University Department of Statistics & Computer Applications, T.M. Bhagalpur University: 29 May, 2013 to 31 December, 2016.
- Member of **Senate** from 2013 to 2016, T.M. Bhagalpur University, Bhagalpur.
- Member of **Senate** from January 2020, T.M. Bhagalpur University, Bhagalpur.
- Member of Academic Council from 2013 to 2016, T.M. Bhagalpur University, Bhagalpur.
- Member of Academic Council from January 2020, T.M. Bhagalpur University, Bhagalpur.
- Head In-charge: 3-5 March, 2011; 11 and 20 April, 2011; 6-19 May, 2011; 3-4 Jan, 2012; 2-3 May, 2012; 8-10 Oct, 2012;

### **Ph.D. Thesis Supervision:**

- Dr. Mahesh Kumar, “Non Homogeneous Poisson Process for Software Reliability Growth Models”, Ph. D., Awarded, T.M. Bhagalpur University, Bhagalpur, **2005**.
- Dr. S. M. Khurshaid Quadri, “A Study of Software Reliability Growth Models Considering Optimal Software Release Policies and Hardware Reliability Theory”, Ph. D., Awarded, Kashmir University, **2008**.
- Dr. Umar Farooq, “Evaluating Effectiveness of Software Testing Techniques with Emphasis on Enhancing Software Reliability”, Ph.D., Awarded, Kashmir Univ., **2012**.
- Dr. Syed Faizul Islam, “Non Homogeneous Poisson Process Software Reliability Growth Model with Testing-Efforts and Change Point”, Ph. D., Awarded, T.M. Bhagalpur University, Bhagalpur, **2013**.
- Dr. Zafar Imam, “Software Fault Detection and Correction Processes in Software Reliability Analysis”, Ph. D., Awarded, T.M. Bhagalpur University, Bhagalpur, **2013**.
- Dr. Radha Krishan Rambola, “Efficient Database Management System: Access, Retrieval”, Ph. D. Awarded, T.M. Bhagalpur University, Bhagalpur, **2013**.
- Dr. Javaid Iqbal, “Software Reliability Growth Models from the perspective of Learning effects and Change-point”, Ph. D. Awarded, Kashmir University, **2014**.
- Dr. Ishrat Jahan Ara, “Delayed S-shaped Software Reliability Growth Model with Testing Effort Functions”, Ph. D. Awarded, T.M. Bhagalpur Univ., Bhagalpur, **2017**.
- Mrs. Seema Rani, “Software Reliability Growth Models and Optimal Release Policy under Fuzzy Environment”, Ph. D. Awarded, T.M. Bhagalpur Univ., Bhagalpur, **2020**.
- Md. Aijaz Ahmad, “Analysis of Inflection S-shaped Software Reliability Growth Models”, Ph. D. Awarded, T.M. Bhagalpur Univ., Bhagalpur, **2021**.
- Md. Shahid Iqbal, “Statistical Modeling and Analysis of Differential Gene Expression of Microarray Data of Cancer”, Ph. D. Student, T.M. Bhagalpur Univ., Bhagalpur

### **M.Sc. Thesis Supervision:**

- Mrs. Loriza Shazmin Rafi, “Determination of the Optimal Allocation for Testing Resource of Modular Software based on SRGM”, M.Sc. Thesis, U.S.P., Fiji, **2010**.

### **Conference/Workshop/Training Program Organized:**

- Convener, National Workshop on “**IT Skills Development Using Open Source Software**” (ITSDOS-2018) in collaboration with Spoken Tutorial, MHRD, IIT Bombay,

at the University Department of Computer Applications (Computer Center), T. M. Bhagalpur University, Bhagalpur, during 16<sup>th</sup> - 18<sup>th</sup> January 2018.

- Convener, National Conference on “Recent Trends in Mathematical and Computational Sciences” (NCRTMCS-2015) in conjunction with 13th National Conference of Indian Society of Information Theory and Applications (ISITA) at University Department of Statistics & Computer Applications, T.M. Bhagalpur University, Bhagalpur, India, during 3rd - 4th January 2015.
- Convener, National Workshop on “Data Analysis Using SPSS” from 15-16 May, 2014, at University Department of Statistics & Computer Applications, T.M. Bhagalpur University, Bhagalpur, India.
- Member of Programme Committee in the IEEE International Conference on Computing for Sustainable Global Development (INDIACom-16), March, 16 – 18, 2016, BVICAM, New Delhi.
- Member of Programme Committee in the International Conference on Recent Trends in Computer Science and Engineering held during Feb, 8-9, 2014, Central University of Bihar, Patna.

**Conference/ Seminars/Workshop/FDP Invited Speaker/ Resource Person:**

- IEEE 8<sup>th</sup> International Conference on Computing for Sustainable Global Development (INDIACom-2021), March, 17 – 19, 2021, BVICAM, New Delhi, India.
- One Week Online Faculty Development Program (FDP) on ‘R Programming Language’ in collaboration with IIT Bombay through SPOKEN TUTORIAL, June, 25-30, 2020, Marwari College, Bhagalpur.
- International Seminar on Statistical Data and International SWOT in Academic Research in Science and Technology, Feb 29- March 1, 2020, Marwari College, Bhagalpur.
- National Webinar on Statistics and its Applications, Oct., 20, 2020, MDU, Rohtak.
- Online International Conference on History and Development of Mathematics, Dec., 22, 2020, MDU, Rohtak, India.
- UGC Sponsored National Seminar on Recent Trends in Pure and Applied Mathematics (NSRTPAM-2019), Dec., 14 – 15, 2019, University Department of Mathematics, T.M. Bhagalpur University, Bhagalpur, India.
- IEEE 6<sup>th</sup> International Conference on Computing for Sustainable Global Development (INDIACom-2019), March, 13 – 15, 2019, BVICAM, New Delhi, India.
- IEEE 5<sup>th</sup> International Conference on Computing for Sustainable Global Development (INDIACom-2018), March, 14 – 16, 2018, BVICAM, New Delhi, India
- UGC Sponsored National Workshop on LaTeX, Nov., 06 – 07, 2017, Department of Mathematics, J.R.S. College, Jamalpur, Munger.
- IEEE 4<sup>th</sup> International Conference on Computing for Sustainable Global Development (INDIACom-2017), March, 1 – 3, 2017, BVICAM, New Delhi, India.
- IEEE 3<sup>rd</sup> International Conference on Computing for Sustainable Global Development (INDIACom-2016), March, 16 – 18, 2016, BVICAM, New Delhi, India.
- IEEE 2<sup>nd</sup> International Conference on Computing for Sustainable Global Development (INDIACom-2015), March, 11 – 13, 2015, BVICAM, New Delhi, India.
- IEEE 1<sup>st</sup> International Conference on Computing for Sustainable Global Development (INDIACom-2014), March, 5 – 7, 2014, BVICAM, New Delhi, India.
- International Conference on History and Development of Mathematical Sciences (ICHDMS-12), Nov, 21 – 24, 2012, M. D. University, Rohtak, India.

### **Conferences/Seminars/Symposia Attended/ Paper Presented:**

- 5th International Conference on Computing, Communication and Security (ICCCS), October 14-16, 2020, Indian Institute of Technology, Patna, India.
- International online symposium on Recent technologies in Computer science, June 30, 2020, Department of Computer Science, JMI, New Delhi, India.
- International Conference on Recent Trends in Computer Science and Engineering (ICRTCSE-2014), Feb, 8-9, 2014, Central University of Bihar, Patna, India
- VI International Symposium on Optimization and Statistics, December 29 to 31, 2008, Department of Statistics and Operations Research, A.M.U., Aligarh, India.
- JSM and International Conference on Statistics, Probability and Related Areas, Jan, 2 – 5, 2007, Cochin, India.
- Third International Conference on Innovative Applications of Information Technology for Developing World, Dec. 10 – 12, 2005, Kathmandu, Nepal.
- 9<sup>th</sup> Conference of Bihar Mathematical Society on Mathematical Modelling for Social Sciences, March, 12 – 13, 2005, P.G. Department of mathematics, T.M. Bhagalpur University, Bhagalpur.
- National Seminar on Statistical Computing, November 26-28, 2002, P.G. Department of Statistics and Computer Applications, T.M. Bhagalpur University, Bhagalpur.
- V International Symposium on Optimization and Statistics, December 28 to 30, 2002, Department of Statistics and Operations Research, A.M.U., Aligarh, India.
- International Conference on Statistical Inference and Reliability, Dec. 21 - 24, 2001, Department of Statistics, Punjab University, Chandigarh, India.
- IV International Symposium on Optimization and Statistics, December 8 to 10, 1998, Department of Statistics and Operations Research, A.M.U., Aligarh, India.
- III International Symposium on Optimization and Statistics, December 19 to 21, 1995, Department of Statistics and Operations Research, A.M.U., Aligarh, India.
- II International Symposium on Optimization and Statistics, November 2 to 4, 1993, Department of Statistics and Operations Research, A.M.U., Aligarh, India.
- 80<sup>th</sup> Indian Science Congress Association, January 3 to 8, 1993, Goa, India.

### **Annexure**

#### **Publications**

##### **Publications List:**

1. **Ahmad, N.**, Ahmad, A., and Farooq, S. U. (2021), “An Assessment of Incorporating Log-logistic Testing Effort into Imperfect Debugging Delayed S-Shaped Software Reliability Growth Model”, *International Journal of Software Innovation*, Vol. 9 (3), pp. ---.
2. Rani, S., **Ahmad, N.**, and Ahmad, A. (2020), “An assessment of Software Reliability Growth Model and Optimal Release Policy with Testing Effort under Fuzzy Environment”. *Solid State Technology*, Vol. 63 (6), pp.5989-6002.
3. Rani, S. and Ahmad, N. (2020), "Software Reliability Growth Modeling with Burr Type XII using Fuzzy Logic," 5th International Conference on Computing, Communication and Security (ICCCS), Patna, pp. 1-5, IEEE, doi:10.1109/ICCCS49678.2020.9277460.

4. Ahmad, A., Iqbal, M. S., and **Ahmad, N.** (2020), “Statistical Analysis of Clinical Studies through SPSS and R”. *PARIPEX-Indian Journal of Research*, Vol. – 9, Issue-6, pp. 1-5.
5. Rani, S. and **Ahmad, N.** (2019), “Analysis of Fuzzy Software Reliability Growth Model and Optimal Release Policy with Log-logistic Testing Effort under Imperfect Debugging”, *International Journal of Computer Science and Network Security*, Vol. 19 (7), pp.185-195.
6. Bokhari, M. U., Siddiqui, M. A., **Ahmad, N.**, and Ashraf, E. (2018), “Considering Burr Type X Testing Effort into S-shaped Software Reliability Modeling and Application”, in *Proceedings of the 5<sup>th</sup> IEEE International Conference on Computing for Sustainable Global Development (INDIACom-2018)*, New Delhi, India, pp. 4246-4251.
7. Farooq, S. U., Quadri, S. M. K., and **Ahmad, N.** (2017), “A Replicated Empirical Study to Evaluate Software Testing Methods”, *Journal of Software: Evaluation and Process*, Vol. 29 (9), pp. 1-22.
8. Bokhari, M. U., Siddiqui, M. A., and **Ahmad, N.** (2017), “Testing Effort Dependent Delayed S-shaped Software Reliability Growth Model with Imperfect Debugging”, *International Journal on Computer Science and Engineering*, Vol. 9(5), pp. 138-148.
9. Siddiqui, M. A., Bokhari, M. U., and **Ahmad, N.** (2017), “Analysis of Incorporating New Modified Weibull Testing–effort into Delayed S-shaped Software Reliability Growth Model with imperfect debugging”, in *Proceedings of the 4<sup>th</sup> IEEE International Conference on Computing for Sustainable Global Development (INDIACom-2017)*, New Delhi, India, pp. 7099-7104.
10. **Ahmad, N.** and Khan, M. G. M. (2016), “Determination of the Optimal Allocation of Testing Resource for Modular Software Reliability Growth using LINGO”, *Journal of Software*, Vol. 11 (7), pp. 664-676.
11. Imam, M. Z, Ara, I. J., and **Ahmad, N.** (2016), “Analysis of Software Fault Detection and Correction Processes with Log-logistic Testing-Effort”, *Recent Advances in Mathematics, Statistics and Computer Science*, ISBN 978-981-4696-16-6, pp. 549-560, 2016.
12. Khan, M. G. M., **Ahmad, N.**, and Rafi, L. S. (2016), “Determining the Optimal Allocation of Testing Resource for Modular Software System using Dynamic Programming”, *Communications in Statistics – Theory and Methods*, Vol. 45(3), pp. 670-694.
13. Rani, S, Ara, I. J., and **Ahmad, N.** (2016), “Recent Review and Current Issues in Software Reliability Growth Models under Fuzzy Environment”, *International Journal of Latest Trends in Engineering and Technology*, Vol. 6 (4), pp. 550-558.
14. Imam, M. Z., Sultan, S., and **Ahmad, N.** (2016), “Analysis of Software Fault Detection and Correction Process Models with Burr Type XII Testing-Effort”, in *Proceedings of*

the *IEEE 3<sup>rd</sup> International Conference on Computing for Sustainable Global Development (INDIACom-2016)*, *IEEE Computer Society*, pp. 894-897.

15. Iqbal, J., Quadri, S. M. K., and **Ahmad, N.** (2015), "Software Reliability Modeling with Learning-Based Fault-Detection Rate", *Computer Science and Engineering: Recent Trends* (ISBN 978-81-8487-391-7) Editors: R. Rajesh and P. Ranjan, Narosa Publishing House, New Delhi, pp. 32-40.
16. Imam, M. Z. and **Ahmad, N.** (2015), "Modeling and Analysis of Fault Detection and Correction Processes in Software Reliability Growth with Exponentiated Weibull Testing Effort Function", *Computer Science and Engineering: Recent Trends* (ISBN 978-81-8487-391-7) Editors: R. Rajesh and P. Ranjan, Narosa Publishing House, New Delhi, pp. 55-63.
17. Islam, S. F. and **Ahmad, N.** (2015), "Incorporating Change Point into Exponentiated Weibull Software Reliability Growth Model and Actual Data Analysis", *Computer Science and Engineering: Recent Trends* (ISBN 978-81-8487-391-7) Editors: R. Rajesh and P. Ranjan, Narosa Publishing House, New Delhi, pp. 229-237.
18. Bokhari, M. U. and **Ahmad, N.** (2014), "Incorporating Burr Type XII Testing-efforts into Software Reliability Growth Modeling and Actual Data Analysis with Applications", *Journal of Software*, Vol. 9 (6), pp. 1389-1400.
19. Iqbal, J., Quadri, S. M. K., and **Ahmad, N.** (2014), "An Imperfect-Debugging Model with Learning-Factor Based Fault-Detection Rate", in *Proceedings of the IEEE International Conference on Computing for Sustainable Global Development (INDIACom-2014)*, *IEEE Computer Society*, pp. 383-387.
20. **Ahmad, N.**, Khan, S., and Khan, M. G. M. (2013), "Planning Accelerated Life Tests for Burr Type X Failure Model with Type I Censoring", *Journal of Statistical Theory and Applications*, Vol. 12 (3), pp. 266-287.
21. Iqbal, J., **Ahmad, N.**, and Quadri, S. M. K. (2013), "A Software Reliability Growth Model with Two Types of Learning", in *Proceedings of the 1st IEEE International Conference on Machine Intelligence Research and Advancement (ICMIRA-2013)*, Katra, Jammu, India, pp. 498-503.
22. Iqbal, J., **Ahmad, N.**, and Quadri, S. M. K. (2013), "A Software Reliability Growth Model with Two Types of Learning and a Negligence Factor", in *Proceedings of the 2nd IEEE International Conference on Image Information Processing (ICIIP-2013)*, Shimla, India, pp. 678-683.
23. Islam, S. F., Imam, M. Z., and **Ahmad, N.** (2013), "A Survey of Software Reliability Growth Models with Change Point", *International Journal of Applied Science & Technology Research Excellence*, Vol. 3 (5), pp. 1 – 9.
24. Rambol, R. K., Imam, M. Z., and **Ahmad, N.** (2013), "An Efficient Approach Concurrency Control in Database Management System: A Performance Analysis",

*International Journal of Computer Science and Network Security*, Vol. 13 (7), pp. 29 – 33.

25. **Ahmad, N.** and Imam, M. Z. (2013), “Software Reliability Growth Models with Log-logistic Testing-Effort Function: A Comparative Study”, *International Journal of Computer Applications*, Vol. 72 (12), pp. 6–11, Published by Foundation of Computer Science, New York, USA.
26. Farooq, S. U., Quadri, S. M. K. and **Ahmad, N.** (2013), “A Controlled Experiment to Evaluate Effectiveness and Efficiency of Three Software Testing Methods”, in *Proceedings of the 6th IEEE International Conference on Software Testing, Verification and Validation (ICST 2013)*, Luxemborg, pp. 493-494.
27. Khan, M. G. M., **Ahmad, N.**, and Prasad, V. D. (2012), “Optimal Compromise Allocation in Two-stage and Stratified Two-stage Sampling Designs for Multivariate Study”, *Journal of Applied Statistical Science*, Vol. 20 (2), pp. 187-197.
28. **Ahmad, N.**, Khan, M. G. M. and Islam, S. F. (2012), “Optimal Allocation of Testing Resource for Modular Software based on Testing-Effort Dependent Software Reliability Growth”, in *Proceedings of the third International Conference on Computing Communication & Networking Technologies (ICCCNT-2012)*, IEEE Computer Society, Coimbatore, Tamilnadu, India, pp. 1-7.
29. Farooq, S. U., Quadri, S. M. K. and **Ahmad, N.** (2012), “Metrics, Models and Measurements in Software Reliability”, in *Proceedings of the 10th IEEE International Symposium on Applied Machine Intelligence and Informatics (SAMI 2012)*, Herl’any, Slovakia, pp. 441-449.
30. Farooq, S. U., Quadri, S. M. K. and **Ahmad, N.** (2012), *Software Testing Techniques Evaluation: An Empirical Approach*, ISBN 978-3-659-19538-9, Lambert Academic Publishing (LAP), Germany.
31. Rambol, R. K., **Ahmad, N.** and Sharma, B. K. (2012), “Efficient Data Accessing through Heterogeneous ERP Solution”, *International Journal of Computer Applications*, Vol. 53 (6), pp.14–17, September 2012. Published by Foundation of Computer Science, New York, USA.
32. Rambol, R. K., **Ahmad, N.** and Deepak, A. (2012), “Efficient Algorithms for Distributed Queries”, *International Journal of Advances in Engineering Research*, Vol. 3 (6), pp.40–61, June 2012.
33. Rambol, R. K., **Ahmad, N.** and Deepak, A. (2012), “Application of Information Technology as ERP in Silk Industry”, *International Journal of Research in Science and Technology*, Vol. 1 (6), pp.29–35, July-September 2012.
34. Rambol, R. K., **Ahmad, N.** and Deepak, A. (2012), “An Effective Security Management of Database through DNA Fingerprinting Recognition using Geometric Parameters”, *International Journal of Computer Applications & Information Technology*, Vol. 1 (2), pp.37–38, September 2012.



35. **Ahmad, N.**, Khan, M. G. M and Rafi, L. S. (2011), “Analysis of an Inflection S-shaped Software Reliability Model Considering Log-logistic Testing-Effort and Imperfect Debugging”, *International Journal of Computer Science and Network Security*, Vol. 11 (1), pp. 161 – 171.
36. **Ahmad, N.**, Quadri, S. M. K. and Razeef, M. (2011), “Comparison of Predictive Capability of Software Reliability Growth Models with Exponentiated Weibull Distribution”, *International Journal of Computer Applications*, Vol. 15 (6), pp.40–43, February 2011. Published by Foundation of Computer Science, New York, USA.
37. Razeef, M., Quadri, S. M. K. and **Ahmad, N.** (2011), “A Comparative Overview of Software Reliability Growth Models”, *International Journal of Advanced Research in Computer Science*, Vol. 2 (1), 99 – 104.
38. Farooq, S. U., Quadri, S. M. K. and **Ahmad, N.** (2011), “Software Measurements and Metrics: Role in Effective Software Testing”, *International Journal of Engineering Science and Technology*, Vol. 3 (1), pp. 671 – 680.
39. Quadri, S. M. K., **Ahmad, N.**, and Farooq, S. U. (2011), “Software Reliability Growth Modeling with Generalized Exponential Testing-effort and Optimal Software Release Policy”, *Global Journal of Computer Science and Technology*, Vol. 11 (2), pp. 26 – 41.
40. **Ahmad, N.**, Quadri, S. M. K., Khan, M. G. M. and Kumar, M. (2011), “Software Reliability Growth Models Incorporating Burr Type III Test-Effort and Cost-reliability Analysis”, *International Journal of Computer Science and Information Technologies*, Vol. 2 (1), pp. 555 – 562.
41. **Ahmad, N.** (2010), “Designing Accelerated Life Tests for Generalized Exponential Distribution with Log-linear Model”, *International Journal of Reliability and Safety*, Vol. 4 (2/3), pp. 238 – 264.
42. **Ahmad, N.**, Khan, M. G. M and Rafi, L. S. (2010), “A Study of Testing-Effort Dependent Inflection S-Shaped Software Reliability Growth Models with Imperfect Debugging”, *International Journal of Quality and Reliability Management*, Vol. 27 (1), pp. 89 – 110.
43. **Ahmad, N.**, Khan, M. G. M and Rafi, L. S. (2010), “Software Reliability Modeling Incorporating Log-Logistic Testing-Effort with Imperfect Debugging”, in *Proceedings of the International Conference on Modeling, Optimization and Computing (ICMOC-2010)*, Durgapur, India, Published by American Institute of Physics, pp. 651 – 657.
44. Quadri, S. M. K. and **Ahmad, N.** (2010), “Software Reliability Growth Modeling with New Modified Weibull Testing-effort and Optimal Release Policy”, *International Journal of Computer Applications*, DOI 10.5120/1127-1477, Vol. 6 (12), pp.1–10, September 2010. Published by Foundation of Computer Science.
45. Khan, M. G. M., **Ahmad, N.**, and Khan, S. (2009), “Determining the Optimum Stratum Boundaries using Mathematical Programming”, *Journal of Mathematical Modelling and Algorithms*, DOI 10.1007/s10852-009-9115-3, Vol. 8 (4), pp. 409 – 423.

46. **Ahmad, N.**, Khan, M. G. M., Quadri, S. M. K. and Kumar, M. (2009), “Modelling and Analysis of Software Reliability with Burr Type X Testing-Effort and Release-Time Determination”, *Journal of Modelling in Management*, Vol. 4 (1), pp. 28 – 54.
47. **Ahmad, N.**, Quadri, S. M. K. and Choudhary, N. (2009), “Design of Accelerated life Tests for Periodic Inspection with Burr Type III Distributions: Models, Assumptions, and Applications,” *Progress in Applied Statistics Research* (ISBN 978-1-60456-124-1), Editor: M. Ahsanullah, Nova Science Publishers, Inc, USA, pp. 27– 46.
48. Khan, M. G. M., Nand, N. and **Ahmad, N.** (2008), “Determining the Optimum Strata Boundary Points using Dynamic Programming”, *Survey Methodology* (a journal published by Statistics Canada), Vol. 34 (2), pp. 203 – 212.
49. Khan, M. G. M., **Ahmad, N.**, and Rafi, L. S. (2008), “Optimal Testing Resource Allocation for Modular Software Based on a Software Reliability Growth Model: a Dynamic Programming Approach”, in *Proceedings of the International Conference on Computer Science and Software Engineering (CSSE-2008)*, Wuhan, China, *IEEE Computer Society*, pp. 759-762.
50. **Ahmad, N.**, Bokhari, M. U., Quadri, S. M. K. and Khan, M. G. M. (2008), “The Exponentiated Weibull Software Reliability Growth Model with Various Testing-Efforts and Optimal Release Policy: A Performance Analysis”, *International Journal of Quality and Reliability Management*, Vol. 25 (2), pp. 211 – 235.
51. **Ahmad, N.**, Quadri, S. M. K. and Choudhary, N. (2008), “Design of Accelerated life Tests for Periodic Inspection with Burr Type III Distributions: Models, Assumptions, and Applications,” *Trends in Applied Statistics Research* (ISBN 978-1-60456-153-1), Editor: M. Ahsanullah, Nova Science Publishers, Inc, USA, pp. 27– 46.
52. **Ahmad, N.**, Khan, M. G. M and Rafi, L. S. (2008), “Inflection S-Shaped Software Reliability Growth Models with Testing-Effort Functions,” in *Proceedings of the VI International Symposium on Optimization and Statistics*, Aligarh Muslim University, Aligarh, India, pp. 151-172.
53. Quadri, S. M. K., **Ahmad, N.**, and Khan, M. G. M. (2008), “Performance Analysis of Software Reliability Model with Burr Type X Testing-Effort and Release Time”, in *Proceedings of the 2<sup>nd</sup> National Conference on Mathematical Techniques: Emerging Paradigms for Electronics and IT Industries, MATEIT-2008*, New Delhi, India, pp. 177-187.
54. Quadri, S. M. K., **Ahmad, N.**, and Peer, M. A. (2008), “Software Optimal Release Policy and Reliability Growth Modeling”, in *Proceedings of the 2<sup>nd</sup> National Conference on Computing for Nation Development, INDIACom-2008*, New Delhi, pp. 423-431.
55. Bokhari, M. U. and **Ahmad, N.** (2007), “Software Reliability Growth Modeling for Exponentiated Weibull Function with Actual Software Failure Data”, *Advances in Computer Science and Engineering: Reports and Monographs- Vol. 2* (ISBN 978-1-86094-827-5), World Scientific Publishing Company, pp. 390 – 396.

56. Sharma, B., Li, Z., Chand, U., and **Ahmad, N.** (2007), *Basic Statistics - Study Guide, Introduction and Assignments*, ISBN 978-982-03-5017-5, The University of the South Pacific, Fiji.
57. **Ahmad, N.**, Islam, A. and Salam, A. (2006), "Analysis of Optimal Accelerated Life Test Plans for Periodic Inspection: the case of Exponentiated Weibull Failure Model," *International Journal of Quality and Reliability Management*, Vol. 23 (8), pp. 1019 – 1046.
58. Bokhari, M. U. and **Ahmad, N.** (2006), "Analysis of a Software Reliability Growth Models: the Case of Log-logistic Test-Effort Function", in *Proceedings of the IASTED International Conference on Modelling and Simulation (MS 2006)*, Montreal, Canada, pp. 540-545.
59. **Ahmad, N.**, Quadri, S. M. K. and Choudhary, N. (2006), "Design of Accelerated life Tests for Periodic Inspection with Burr Type III Distributions: Models, Assumptions, and Applications," *Journal of Applied Statistical Science*, Vol. 15 (2), pp. 161 – 179.
60. Khan, M. G. M., Chand, M. A. and **Ahmad, N.** (2006), "Optimum Allocation in Two-stage and Stratified Two-stage Sampling for Multivariate Surveys", in *Proceedings of the American Statistical Association, Survey Research Methods Section*, Alexandria, VA, pp. 3215 – 3220.
61. Quadri, S. M. K., **Ahmad, N.**, Peer, M. A. and Kumar, M. (2006), "Non-homogeneous Poisson Process Software Reliability Growth Model with Generalized exponential Testing-Effort Functions", *RAU Journal of Research*, Vol. 16 (1-2), pp. 159 – 163.
62. Bokhari, M. U., **Ahmad, N.**, Islam, A. and Salam, A. (2006), "Optimal Accelerated Life Test Plans for Exponentiated Weibull Failure Model," in *Proceedings of the International Conference on Degradation, Damage, Fatigue and Accelerated Life Models in Reliability Testing (ALT' 2006)*, Angers, France, pp. 1 – 9.
63. Islam, A. and **Ahmad, N.** (2005), "The Mukherjee-Islam Failure Model: Some Properties and Test Derivation," *Journal of Applied Statistical Science*, Vol. 14, pp. 167-173.
64. Kumar, M., **Ahmad, N.** and Quadri, S. M. K. (2005), "Software Reliability Growth Models and Data Analysis with a Pareto Test-Effort," *RAU Journal of Research*, Vol. 15 (1-2), pp. 124 - 128.
65. **Ahmad, N.**, Kumar M. and Choudhary, N. (2004), "Accelerated Life Test Plans for the Log-logistic Distribution under Intermittent Inspection and Type I Censoring," *RAU Journal of Research*, Vol. 14 (1), pp. 104 -110.
66. **Ahmad, N.** and Choudhary, N. (2002), "Design of Accelerated life Tests for Periodic Inspection with Burr Type III distributions," in *Proceeding of V International Symposium on Optimization and Statistics*, A.M.U., Aligarh, India, pp. 118-154.

67. Bokhari, M.U., Islam, A., **Ahmad, N.** and Quadri, S.M.K. (2002), “Software Reliability Growth Model with Exponentiated Weibull Testing-Effort,” in *Proc of V International Symposium on Optimization and Statistics*, A.M.U., Aligarh, pp. 318-329.
68. **Ahmad, N.** and Islam, A. (1996), “Optimal Accelerated Life Test Designs for Burr Type XII Distributions Under Periodic Inspection and Type I Censoring,” *Naval Research Logistic*, Vol. 43, pp. 1049 -1077.
69. **Ahmad, N.** and Zaheeruddin. (1995), “Accelerated Life Test Plans for the Log-logistic Distribution under Intermittent Inspection and Type I Censoring,” in *Proceeding of III International Symposium on Optimization and Statistics*, A.M.U., Aligarh, India, pp. 68-73.
70. **Ahmad, N.**, Islam, A., Kumar, R. and Tuteja, R. K. (1994), “Optimal Design of Accelerated Life Test Plans Under Periodic Inspection and Type I Censoring: The Case of Rayleigh Failure Law,” *South African Statistical Journal*, Vol. 28, pp. 27 - 35.
71. Islam, A. and **Ahmad, N.** (1994), “Optimal Design of Accelerated Life Tests for the Weibull Distribution under Periodic Inspection and Type I Censoring,” *Microelectronics Reliability*, Vol. 34 (9), pp. 1459 -1468.
72. **Ahmad, N.** and Islam, A. (1993), “Optimal Design of Accelerated Life Test Plans Under Periodic Inspection and Type I Censoring: The Case of Rayleigh Failure Law,” in *Proceeding of II International Symposium on Optimization and Statistics*, A.M.U., Aligarh, India, pp. 121-126.

#### **Papers Presented in Conferences:**

1. Md. Zafar Imam and N. Ahmad, (2019), “Modeling of Software Fault Detection and Correction Processes with Burr Type XII Testing-Effort”, National Seminar on Recent Trends in Pure and Applied Mathematics (NSRTPAM-2019), University Department of Mathematics, T.M. Bhagalpur University, Dec., 14 – 15, 2019, Bhagalpur, India.
2. Seema Rani and N. Ahmad, (2019), “Fuzzy Reliability and Analysis with Optimal Release Policy”, National Seminar on Recent Trends in Pure and Applied Mathematics (NSRTPAM-2019), University Department of Mathematics, T.M. Bhagalpur University, Dec., 14 – 15, 2019, Bhagalpur, India
3. Md. Zafar Imam, Ishrat Jahan Ara and N. Ahmad, (2015), “Analysis of Software Fault Detection and Correction Processes with Log-logistic Testing-Effort”, International Conference on Recent Advances in Mathematics, Statistics and Computer Science, Central University of South Bihar,(ICRAMSCS-15), 29<sup>th</sup> – 31<sup>th</sup> May, Patna, India.
4. Syed Faizul Islam, **Ahmad, N.**, and Khan, M.G.M. (2015), “Analysis of Software Reliability Growth Model which Incorporates Log-logistic Testing-Effort and Change Point with Actual Data” presented in *the National Conference on Recent Trends in Mathematical and Computational Sciences*, (NCRTMCS-2015), Jan. 3–4, T. M. Bhagalpur University, Bhagalpur, India.
5. Ishrat Jahan Ara and **Ahmad, N.** (2015), “Delayed S-Shaped Software Reliability Growth Models With Testing-Effort Function” presented in *the National Conference on Recent*

- Trends in Mathematical and Computational Sciences*, (NCRTMCS-2015), Jan. 3–4, T. M. Bhagalpur University, Bhagalpur, India.
6. Akhtar, M.S and **Ahmad, N.** (2015), “Software Reliability Modelling: A Recent Trend” presented in *the National Conference on Recent Trends in Mathematical and Computational Sciences*, (NCRTMCS-2015), Jan. 3–4, T.M. Bhagalpur University, Bhagalpur, India.
  7. Javaid Iqbal, S. M. K. Quadri and **Ahmad, N.** (2015), “Change-Point Modeling in the Study of Software Reliability Growth Models” presented in *the National Conference on Recent Trends in Mathematical and Computational Sciences*, (NCRTMCS-2015), Jan. 3–4, T. M. Bhagalpur University, Bhagalpur, India.
  8. Javaid Iqbal, **Ahmad, N.** and S. M. K. Quadri (2015), “Learning Effects Modeling in the Study of Software Reliability Growth Models” presented in *the National Conference on Recent Trends in Mathematical and Computational Sciences*, (NCRTMCS-2015), Jan. 3–4, T. M. Bhagalpur University, Bhagalpur, India.
  9. Seema Rani and **Ahmad, N.** (2015), “Software Reliability Growth Models under Fuzzy Environment: A Review” presented in *the National Conference on Recent Trends in Mathematical and Computational Sciences*, (NCRTMCS-2015), Jan. 3–4, T. M. Bhagalpur University, Bhagalpur, India.
  10. Md. Zafar Imam, D. K. Sharma and **Ahmad, N.** (2015), “Study and Modeling of Software Reliability of Fault Detection and Fault Correction Processes” presented in *the National Conference on Recent Trends in Mathematical and Computational Sciences*, (NCRTMCS-2015), Jan. 3–4, T. M. Bhagalpur University, Bhagalpur, India.
  11. Kumar Satyam and **Ahmad, N.** (2015), “Information Search Analysis in Semantic Web Patterns using Ontology” presented in *the National Conference on Recent Trends in Mathematical and Computational Sciences*, (NCRTMCS-2015), Jan. 3–4, T. M. Bhagalpur University, Bhagalpur, India.
  12. Md. Zafar Imam and Ahmad, N. (2013), “A Study of Software Fault Detection and Fault Correction Process in Software Reliability Analysis” in *Proceedings of UGC Sponsored National Seminar on Application of Fuzzy Mathematics in Other Relevant Fields*, April. 11-12, 2013, T.M.B. University, Bhagalpur, India
  13. **Ahmad, N.** and Md. Zafar Imam (2012), “Predictive Capability of Software Reliability Growth Models with Log-logistic Testing-Effort Function: A Comparative Study” presented in *the VII International Symposium on Optimization and Statistics*, (ISOS-2012), Dec. 21–23, Aligarh Muslim University, Aligarh, India.
  14. Md. Zafar Imam and **Ahmad, N.** (2012), “A Review and Current Issues in Software Reliability Analysis of Software Fault Detection and Fault Correction Process” presented in *the International Conference on History and Development of Mathematical Sciences* (ICHDMS-12), Nov, 21 – 24, 2012, M. D. University, Rohtak, India.
  15. Syed Faizul Islam and **Ahmad, N.** (2012), “A Review of Recent Research and Current Issues in Testing-Effort Dependent Software Reliability Growth Models with Change Point” presented in *the VII International Symposium on Optimization and Statistics*, (ISOS-2012), Dec. 21–23, Aligarh Muslim University, Aligarh, India.

16. Syed Faizul Islam and **Ahmad, N.** (2012), "A Comparative Study of Non-Homogenous Poisson Process Software Reliability Growth Models with Testing-Efforts and Change Point" presented in *the International Conference on History and Development of Mathematical Sciences (ICHDMS-12)*, Nov, 21 – 24, 2012, M. D. University, Rohtak, India.
17. Quadri, S. M. K., Sheikh Umar Farooq and **Ahmad N.** (2010), "What Should be Measured During Software Testing?", presented in 6th JK Science Congress, Srinagar.
18. Sheikh Umar Farooq, Quadri, S. M. K. and **Ahmad N.** (2010), "Towards More Successful Software Testing", presented in 6th JK Science Congress, Srinagar, India.
19. Sheikh Umar Farooq, Quadri, S. M. K. and **Ahmad N.** (2010), "Decisive Factors for Selecting Software Testing Techniques", presented in 6th JK Science Congress, Srinagar.
20. Bokhari, M. U. and **Ahmad, N.** (2008), "Performance Analysis of Non-homogeneous Poisson Process Software Reliability Growth Model with Various Testing-effort Function with Actual Software Failure Data", presented in *the International Joint Conferences on Computer, Information, and Systems Sciences, and Engineering (CISSE 08)*, Dec, 5 – 13, Bridgeport, CT.
21. **Ahmad, N.**, Khan, M. G. M and Rafi, L. S. (2008), "Inflection S-Shaped Software Reliability Growth Models with Testing-Effort Functions," presented in *the VI International Symposium on Optimization and Statistics*, Dec. 29–31, Aligarh Muslim University, Aligarh, India.
22. Khan, M. G. M., **Ahmad, N.**, and Khan, S., (2008), "Determining Optimum Strata Boundaries using an Auxiliary Variable from Actual Health Population Data" presented in *the VI International Symposium on Optimization and Statistics, (ISOS-2008)*, Dec. 29–31, Aligarh Muslim University, Aligarh, India.
23. **Ahmad, N.**, Bokhari, M. U., Quadri, S. M. K. and Khan, M. G. M. (2007), "The Exponentiated Weibull Software Reliability Growth Models with Various Testing-efforts: A Performance Analysis", presented in *the JSM and International Conference on Statistics, Probability and Related Areas*, Jan, 2 – 5, Cochin, India.
24. Bokhari, M. U., Quadri, S. M. K. and **Ahmad, N.** (2007), "Analysis of Non-homogeneous Poisson Process Software Reliability Growth Model with Burr Type XII Testing-effort Function", presented in *the International Conference on Modelling and Optimization of Structures, Processes and Systems (ICMOSPS'07)*, Jan, 22 – 24, Durban, South Africa.
25. Bokhari, M. U., Ahmad, M. I. and **Ahmad, N.** (2007), "Software Reliability Growth Modeling for Burr Type XII Function: Performance Analysis", presented in *the International Conference on Modelling and Optimization of Structures, Processes and Systems (ICMOSPS'07)*, Jan, 22 – 24, Durban, South Africa.
26. Bokhari, M. U. and **Ahmad, N.** (2005), "Software Reliability Growth Modeling for Exponentiated Weibull function with Actual Software Failure Data", presented in *the Third International Conference on Innovative Applications of Information Technology for Developing World (AACC 2005)*, Dec. 10 – 12, Kathmandu, Nepal.

27. **Ahmad, N.** (2005), “Software Reliability Growth Models with Log-logistic Testing-Effort: Analysis and Applications”, presented in *the 9<sup>th</sup> Conference of Bihar Mathematical Society on Mathematical Modelling for Social Sciences*, March 12 – 13, Bhagalpur, India.
28. **Ahmad, N.** (2001), “Analysis of Optimal Accelerated Life Test Plans for Exponentiated Weibull Family Under Periodic Inspection and Type I Censoring”, presented in *the International Conference on Statistical Inference and Reliability*, Dec. 21 - 24, Department of Statistics, Punjab University, Chandigarh, India.
29. **Ahmad, N.,** and Islam, A. (1998), “Maximum Likelihood Methods for Fitting the Burr Type III Distribution to Type I Progressively (Multiply) Censored Life Test Data, ” presented in *the IV International Symposium on Optimization and Statistics*, Dec. 8–10, Aligarh Muslim University, Aligarh, India.
30. **Ahmad, N.,** and Islam, A. (1998), “Some Properties of the Mukherjee-Islam Failure Model with an Application to life testing,” presented in *the IV International Symposium on Optimization and Statistics*, Dec. 8–10, Aligarh Muslim University, Aligarh, India.
31. **Ahmad, N.** and Zaheeruddin (1995), “Accelerated Life Test Plans for the Log-logistic Distribution under Intermittent Inspection and Type I Censoring,” presented in *the III International Symposium on Optimization and Statistics*, A.M.U., Aligarh, India.