



CURRICULUM VITAE

PERSONAL DATA

Name	Prof. Naif Mohammed Ayedh Alotaibi
Nationality	Saudi
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EDUCATION

Year	Academic Degree	Institution
2018	PhD in Mathematics and Statistics	University of Salford in UK
2009	Masters of Science in Statistics	King Saud University in SA
2003	Bachelor of Mathematics	Teachers College - King Saud University in SA

WORK EXPERIENCE

Period	Position	Address
From 14/11/1445H Until now	Vice President for Graduate Studies & Research Aff	Imam Mohammad Ibn Saud Islamic University
From 23/12/1441H to 14/11/1445H	Dean	College of Sciences - Imam Mohammad Ibn Saud Islamic University
From 08/02/1440H to 23/12/1441H	Vice Dean of the College of Science for Educational Affairs	College of Sciences - Imam Mohammad Ibn Saud Islamic University
From 29/02/1440H to 08/04/1441H	General Supervisor of the Studies and Information Center	Imam Mohammad Ibn Saud Islamic University
From 28/08/1443H Until now	Associate Professor in the Department of Mathematics and Statistics	College of Sciences - Imam Mohammad Ibn Saud Islamic University
From 1439H to 1443H	Assistant Professor in the Department of Mathematics and Statistics	College of Sciences - Imam Mohammad Ibn Saud Islamic University
From 1431H to 1439H	Lecturer in the Department of Mathematics and Statistics	College of Sciences - Imam Mohammad Ibn Saud Islamic University
From 1429H to 1431H	Lecturer in Mathematics Department	Teachers College - Riyadh
From 1424H to 1429H	Assistant Teacher in Mathematics Department	Teachers College - Riyadh

RESEARCH INTERESTS

Mathematical Statistics

Applied Statistics

Reliability Theory

PUBLICATIONS

1. Roy, A., Gupta, S. P., Islam, M., Arman, S. E., Azad, A. K. M., Alotaibi, N., ... & Hasan, M. M. (2025). Enhancing Histological Cancer Cell Detection: Integrating XAI with Deep Learning for Improved Accuracy, Interpretability, and Clinical Trust.
2. Pappu, M. A. A., Alamin, M., Noman, M. A., Sultana, M. H., Ahmed, M. F., Hossain, M. S., ... & Mollah, M. N. H. (2025). Multi-Transcriptome-Informed Network Pharmacology Reveals Novel Biomarkers and Therapeutic Candidates for Parkinson's Disease. *Genes*, 16(12), 1459.
3. Sathi, T. A., Jany, R., Azad, A. K. M., Alyami, S. A., Alotaibi, N., Hussain, I., & Hossain, M. A. (2025). Explainable Federated Learning for Multi-Class Heart Disease Diagnosis via ECG Fiducial Features. *Diagnostics*, 15(24), 3110.
4. Moni, M. A., Shahid, S. B., Kaikau, M., Kabir, M. H., Yousuf, M. A., N. Alotaibi, A. K. M., ... & Bhuiyan, T. (2025). Novel Deep Learning for Multi-class Classification of Alzheimer's in Disability using MRI Datasets. *Frontiers in Bioinformatics*, 5, 1567219.
5. Alotaibi, N. (2025). Actuarial and various entropy measures for a new extended log Kumaraswamy model: Properties and applications. *Alexandria Engineering Journal*, 126, 377-392.
6. Scarf, P., N. Alotaibi, Cavalcante, C. A., Rodrigues, A. J., & Melo, Y. R. (2025). On periodic maintenance for a protection system. *Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability*, 239(3), 568-583.
7. Rahman, M. O., Das, A., Naeem, N., Hossain, M. A., Alam, N. Alotaibi, Azad, A. K. M., ... & Moni, M. A. (2024). An Integrated Framework to Identify Prognostic Biomarkers and Novel Therapeutic Targets in Hepatocellular Carcinoma-Based Disabilities. *Biology*, 13(12), 966.
8. Esha, J. F., Islam, T., Pranto, M. A. M., Borno, A. S., Faruqui, N. Alotaibi, Yousuf, M. A., ... & Moni, M. A. (2024). Multi-View Soft Attention-Based Model for the Classification of Lung Cancer-Associated Disabilities. *Diagnostics*, 14(20), 2282.
9. Hashem, A. F., Alotaibi, N., Alyami, S. A., Abdelkawy, M. A., Elgawad, M. A. A., Yousof, H. M., & Abdel-Hamid, A. H. (2024). Utilizing Bayesian inference in accelerated testing models under constant stress via ordered ranked set sampling and hybrid censoring with practical validation. *Scientific Reports*, 14(1), 14406.
10. Cavalcante, C. A., Scarf, P., Melo, Y. R., Rodrigues, A. J., & Alotaibi, N. (2024). Planning maintenance when resources are limited: a study of periodic opportunistic replacement. *IMA Journal of Management Mathematics*, dpae015.Ali, F., Alotaibi, N., & Al-Dayel, I. (2024) .
11. Scarf, P., Alotaibi, N. M., Cavalcante, C. A., Melo, Y. R., & Rodrigues, A. J. (2024). Modified age-based replacement. *Reliability Engineering & System Safety*, 110022.
12. Ali, F., Alotaibi, N., & Al-Dayel, I. (2024). ON $\$(2, 3, n)$ \$-GENERATIONS OF THE FISCHER GROUP $\$ F_i_{\{23\}} \$$. *JP Journal of Algebra, Number Theory and Applications*, 63(3), 281-296.
13. Scarf, P., Alotaibi, N., Cavalcante, C. A., Rodrigues, A. J., & Melo, Y. R. (2024). On periodic maintenance for a protection system. *Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability*, 1748006X241254420.
14. Alyami, S. A., Hassan, A. S., Elbatal, I., Alotaibi, N., Gemeay, A. M., & Elgarhy, M. (2024). Estimation methods based on ranked set sampling for the arctan uniform distribution with application. *AIMS Mathematics*, 9(4), 10304-10332.
15. Alotaibi, N., Al-Moisheer, A. S., Elbatal, I., Alyami, S. A., Gemeay, A. M., & Almetwally, E. M. (2024). Bivariate step-stress accelerated life test for a new three-parameter model under progressive censored schemes with application in medical. *AIMS Mathematics*, 9(2), 3521-3558.
16. Elgawad, M. A. A., Barakat, H. M., Alawady, M. A., El-Rahman, D. A. A., Hussein, I. A., Hashem, A. F., & Alotaibi, N. (2023). Entropy and Some of Its More Recent Related Measures for Concomitants of K-Record Values in an Extended FGM Family. *Mathematics*, 11(24), 4934.
17. Rana, M. M., Islam, M. M., Talukder, M. A., Uddin, M. A., Aryal, S., Alotaibi, N., ... & Moni, M. A. (2023). A robust and clinically applicable deep learning model for early detection of Alzheimer's. *IET Image Processing*, 17(14), 3959-3975.
18. Ahmed, F. F., Das, A. D., Sumi, M. J., Islam, M. Z., Rahman, M. S., Rashid, M. H., ... & Moni, M. A. ,Alotaibi, N (2023).

- Identification of genetic biomarkers, drug targets and agents for respiratory diseases utilising integrated bioinformatics approaches. *Scientific Reports*, 13(1), 19072.
19. da Silva Rodrigues, A. J., Cavalcante, C. A. V., Alberti, A. R., Scarf, P., & Alotaibi, N. M. (2023). Mathematical modelling of mission-abort policies: a review. *IMA Journal of Management Mathematics*, 34(4), 581-597.
 20. Alotaibi, N. M., Scarf, P., Cavalcante, C. A., Lopes, R. S., e Silva, A. L. D. O., Rodrigues, A. J., & Alyami, S. A. (2023). Modified-opportunistic inspection and the case of remote, groundwater well-heads. *Reliability Engineering & System Safety*, 237, 109389.
 21. Paul, S. G., Saha, A., Arefin, M. S., Bhuiyan, T., Biswas, A. A., Reza, A. W., ... & Moni, M. A. (2023). A Comprehensive Review of Green Computing: Past, Present, and Future Research. *IEEE Access*.
 22. Alotaibi, N., Al-Moisheer, A. S., Elbatal, I., Shrahili, M., Elgarhy, M., & Almetwally, E. M. (2023). Bayesian and Non-Bayesian Estimation for a New Extension of Power Topp–Leone Distribution under Ranked Set Sampling with Applications. *Axioms*, 12(8), 722.
 23. Uddin, M. J., Ahamad, M. M., Hoque, M. N., Walid, M. A. A., Aktar, S., Alotaibi, N., ... & Moni, M. A. (2023). A comparison of machine learning techniques for the detection of type-2 diabetes mellitus: experiences from bangladesh. *Information*, 14(7), 376.
 24. Uddin, M. J., Ahamad, M. M., Sarker, P. K., Aktar, S., Alotaibi, N., Alyami, S. A., ... & Moni, M. A. (2023). An Integrated Statistical and Clinically Applicable Machine Learning Framework for the Detection of Autism Spectrum Disorder. *Computers*, 12(5), 92.
 25. Alotaibi, N., Al-Moisheer, A. S., Elbatal, I., Shrahili, M., Elgarhy, M., & Almetwally, E. M. (2023). Half Logistic Inverted Nadarajah–Haghighi Distribution under Ranked Set Sampling with Applications. *Mathematics*, 11(7), 1693.
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 27. Alotaibi, N., Elbatal, I., Shrahili, M., Al-Moisheer, A. S., Elgarhy, M., & Almetwally, E. M. (2023). Statistical inference for the Kavya–Manoharan Kumaraswamy model under ranked set sampling with applications. *Symmetry*, 15(3), 587.
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 30. Alotaibi, N., Elbatal, I., Almetwally, E. M., Alyami, S. A., Al-Moisheer, A. S., & Elgarhy, M. (2022). Bivariate step-stress accelerated life tests for the Kavya–Manoharan exponentiated Weibull model under progressive censoring with applications. *Symmetry*, 14(9), 1791.
 31. Alyami, S. A., Elgarhy, M., Elbatal, I., Almetwally, E. M., Alotaibi, N., & El-Saeed, A. R. (2022). Fréchet Binomial Distribution: Statistical Properties, Acceptance Sampling Plan, Statistical Inference and Applications to Lifetime Data. *Axioms*, 11(8), 389.
 32. Alotaibi, N., Hashem, A. F., Elbatal, I., Alyami, S. A., Al-Moisheer, A. S., & Elgarhy, M. (2022). Inference for a Kavya–Manoharan Inverse Length Biased Exponential Distribution under Progressive-Stress Model Based on Progressive Type-II Censoring. *Entropy*, 24(8), 1033.
 33. Elbatal, I., Khan, S., Hussain, T., Elgarhy, M., Alotaibi, N., Semary, H. E., & Abdelwahab, M. M. (2022). A New Family of Lifetime Models: Theoretical Developments with Applications in Biomedical and Environmental Data. *Axioms*, 11(8), 361.
 34. Alyami, S. A., Elbatal, I., Alotaibi, N., Almetwally, E. M., & Elgarhy, M. (2022). Modeling to Factor Productivity of the United Kingdom Food Chain: Using a New Lifetime-Generated Family of Distributions. *Sustainability*, 14(14), 8942.
 35. Alyami, S. A., Babu, M. G., Elbatal, I., Alotaibi, N., & Elgarhy, M. (2022). Type II Half-Logistic Odd Fréchet Class of Distributions: Statistical Theory and Applications. *Symmetry*, 14(6), 1222.
 36. Alotaibi, N., Elbatal, I., Almetwally, E. M., Alyami, S. A., Al-Moisheer, A. S., & Elgarhy, M. (2022). Truncated Cauchy power Weibull-G class of distributions: Bayesian and non-Bayesian inference modelling for COVID-19 and carbon fiber data. *Mathematics*, 10(9), 1565.
 37. Shafiq, A., Sindhu, T. N., & Alotaibi, N. (2022). A novel extended model with versatile shaped failure rate: Statistical inference with Covid-19 applications. *Results in Physics*, 105398.
 38. Elbatal, I., Alotaibi, N., Almetwally, E. M., Alyami, S. A., & Elgarhy, M. (2022). On Odd Perks-G Class of Distributions: Properties, Regression Model, Discretization, Bayesian and Non-Bayesian Estimation, and Applications. *Symmetry*, 14(5), 883.
 39. Al-Moisheer, A. S., & Alotaibi, N. (2022). A NEW EXTENSION OF INVERSE POWER AILAMUJIA DISTRIBUTION WITH APPLICATION. *Advances and Applications in Statistics*, 76, 1-22.
 40. Elbatal, I., Alotaibi, N., Al-Dayel, I., Shawki, A. W., & Elgarhy, M. (2022). Statistical Analysis of COVID-19 Data in Kingdom of Saudi Arabia Using: Sine Modified Weibull Model. *JP Journal of Biostatistics*, 20, 11-26.
 41. Elbatal, I., Alotaibi, N., Alyami, S. A., Elgarhy, M., & El-Saeed, A. R. (2022). Bayesian and non-Bayesian estimation of

- the Nadarajah-Haghighi distribution: using progressive Type-1 censoring scheme. *Mathematics*, 10(5), 760.
42. Al-Dayel, I., Alotaibi, N., Elbatal, I., Aidi, K., & Hassan, A. S. (2022). MODELLING TO COVID-19 DATA IN SAUDI ARABIA USING: A NEW XGAMMA MODEL. *Advances and Applications in Statistics*, 74, 145-166.
 43. Alotaibi, N., Al-Dayel, I., Elbatal, I., Ezzeldin, M. R., Elgarhy, M., & Al-karawi, K. A. (2022). Statistical Analysis of Covid-19 Pandemic in Saudi Arabia. *Advances and Applications in Statistics*, 74, 107-118.
 44. Alotaibi, N., Elbatal, I., Malyk, I. V., & Elgarhy, M. (2022). A NEW COMPOUND LIFETIME MODEL WITH MEDICAL APPLICATIONS.
 45. Al-Dayel, I., Alshahrani, M. N., Elbatal, I., Alotaibi, N., Shawki, A. W., & Elgarhy, M. (2022). Statistical Analysis of COVID-19 Data for Three Different Regions in the Kingdom of Saudi Arabia: Using a New Two-Parameter Statistical Model. *Computational and Mathematical Methods in Medicine*, 2022(1), 2066787 .
 46. Sindhu, T. N., Hussain, Z., Alotaibi, N., & Muhammad, T. (2022). Estimation method of mixture distribution and modeling of COVID-19 pandemic. *AIMS Mathematics*, 7(6), 9926-9956.
 47. Scarf, P., Khare, A., & Alotaibi, N. (2022). On skill and chance in sport. *IMA Journal of Management Mathematics*, 33(1), 53-73.
 48. Shrahili, M., Al-Omari, A. I., & Alotaibi, N. (2021). Acceptance Sampling Plans from Life Tests Based on Percentiles of New Weibull-Pareto Distribution with Application to Breaking Stress of Carbon Fibers Data. *Processes*, 9(11), 2041.
 49. Alotaibi, N. (2021). Statistical and deterministic analysis of covid-19 spread in Saudi Arabia. *Results in Physics*, 28, 104578.
 50. Al-Omari, A. I., Hassan, A. S., Alotaibi, N., Shrahili, M., & Nagy, H. F. (2021). Reliability Estimation of Inverse Lomax Distribution Using Extreme Ranked Set Sampling. *Advances in Mathematical Physics*, 2021.
 51. Elbatal, I., & Alotaibi, N. (2021). Modelling to Engineering Data Using a New Class of Continuous Models. *Journal of Function Spaces*, 2021.
 52. Shaukat, M. H., Alotaibi, N., Hussain, I., & Shrahili, M. (2021). The Analysis of the Incidence Rate of the COVID-19 Pandemic Based on Segmented Regression for Kuwait and Saudi Arabia. *Mathematical Problems in Engineering*, 2021.
 53. Alotaibi, N. (2021). A new lifetime distribution: properties, copulas, applications, and different classical estimation methods. *Complexity*, 2021.
 54. Benchiha, S., Al-Omari, A. I., Alotaibi, N., & Shrahili, M. (2021). Weighted generalized quasi lindley distribution: Different methods of estimation, applications for covid-19 and engineering data. *AIMS Math*, 6, 11850-11878.
 55. Shrahili, M., Alotaibi, N., Kumar, D., & Alyami, S. A. (2020). Inference for the two-parameter reduced Kies distribution under progressive type-II censoring. *Mathematics*, 8(11), 1997.
 56. Alotaibi, N. M., Cavalcante, C. A. V., Lopes, R. S., & Scarf, P. A. (2020). Preventive replacement with defaulting. *IMA Journal of Management Mathematics*, 31(4), 491-504.
 57. Shrahili, M., Alotaibi, N., Kumar, D., & Shafay, A. R. (2020). Inference on exponentiated power Lindley distribution based on order statistics with application. *Complexity*, 2020.
 58. Shrahili, M., & Alotaibi, N. (2020). A New Parametric Life Family of Distributions: Properties, Copula and Modeling Failure and Service Times. *Symmetry*, 12(9), 1462.
 59. Alotaibi, N., & Malyk, I. V. (2020). A Generalization of Binomial Exponential-2 Distribution: Copula, Properties and Applications. *Symmetry*, 12(8), 1338.
 60. Nafisah, I., Shrahili, M., Alotaibi, N., & Scarf, P. (2019). Virtual series-system models of imperfect repair. *Reliability Engineering & System Safety*, 188, 604-613.
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 63. Al-Omari, A. I., Alotaibi, N., Alomani, G. A., & Al-Moisheer, A. S. Acceptance sampling plans for truncated lifetime tests under two-parameter Pranav distribution. *Italian Journal of Pure and Applied Mathematics*, 669.