

# CURRICULUM VITAE

Mahmoud M. Smadi, PhD

Professor

Department of Mathematics & Statistics

Jordan University of Science & Technology

P.O. Box 3030, 22110, Irbid,

JORDAN

**Tel:** +962-2-7201000 (Ext. 23456).

**Mobile:** +962- 785907108

**Fax:** +962-2-7095014

**E-mail:** [smadi@just.edu.jo](mailto:smadi@just.edu.jo)



## **Education:**

- Ph.D., Statistics, Colorado State University, USA, 1997.
- M.Sc., Statistics, Yarmouk University, Jordan, 1986.
- B.Sc., Statistics, Yarmouk University, Jordan, 1983.

## **Research Interests:**

Survival and Reliability Analysis, Analysis of Medical Data, Time Series Analysis.

## **Professional Activities:**

- Reviewer for a number of International Journals including:
  - Jordan Journal of Mathematics and Statistics
  - Pakistan Journal of Statistics and Operations Research
  - Journal of Statistics Applications & Probability
  - Journal of Applied Probability and Statistics
  - Journal of Information Sciences Letters
  - Journal of Statistics Applications & Probability Letters

## **Academic Experience:**

- Professor: Jordan University of Science & Technology, 2024 to present.
- Associate Professor: Jordan University of Science & Technology, 2011-2024.
- Assistant Professor: Jordan University of Science & Technology, Jordan, 1997 to 2011.
- (Assistant Professor: The University of Qatar, Qatar, 2003 to 2006 (unpaid leave)).
- (Associate Professor: The University of Tabuk, 2014-2016 (Sabbatical leave))
- Statistical Consultant (Ph. D. Candidate), Franklin A. Graybill Statistical Laboratory, Colorado State University, Fort Collins, Colorado, U.S.A., 1996 to 1997.

## **Administrative Experience:**

- Dean Assistant, Faculty of Science and Arts, Jordan University of Science & Technology, Jordan, 2001/2002.
- Director of Statistics & Information Unit, The University of Tabuk, KSA, 2014-2016.
- Chairman, Department of Mathematics & Statistics, Jordan University of Science & Technology, Jordan, 2017/2018.

## **Professional Experience**

- National Statistical Consultant, 2017, UNISCO, Jordan. Capacity Development Plan on the Education Management Information System (EMIS) Data Utilization. Ministry of Education, Jordan. In this project we developed the activities on the capacity development plan of Ministry of Education (MoE) directorates so the ministry will be able to analyze data coming from OpenEMIS, utilize and formulate policies based on the statistical data. In particular, my tasks in this project were the following:
  - Identifying key stakeholders in MoE and other partners and helping them to provide inputs on the EMIS data utilization for policy making and planning.
  - Identifying the needs of capacity development plan on the calculation of educational indicators, preparation of effective statistical yearbook and further utilization of EMIS data for making and planning the educational policy in MoE.
  - Preparing the contents of capacity development plan on the utilization and statistical analysis of EMIS data along with senior international consultant for the policy making and planning.
- Provide statistical consultation and data analysis for graduate students and faculty members, Jordan University of Science & Technology, Jordan.

- Member of a committee in Accreditation and Quality Assurance Commission for Higher Education Institutions in Jordan, 2022. My tasks in this committee were the following:
  - Establishing special accreditation criterion for the Bachelors of Statistics program.
  - Writing the learning outcomes for the Bachelors of Statistics program in Jordan universities.
- Lecturer for **14** workshops on statistical analysis using SPSS for faculty members in Jordan University of Science & Technology. Center of Academic Development and Quality (CADQ), Jordan University of Science & Technology, Jordan.
- Lecture/Time series Analysis for Air Pollution Mortality: Practical Session Using R Software. The 2nd GEO Health HUB for Climate change in MENA workshop and Conference Lebanon, 2023.

### **Publications in Indexed and Refereed Journals:**

1. Muhannad Ababneh, Abdullah Al-Kasasbeh, Mohamad Jarrah, Lujain Malkawi, Omar Sanduka, Areje M. Smadi, **Mahmoud Smadi**, (2022), Myocardial injury and its correlation to mortality in hospitalized COVID-19 patients: a retrospective cohort study, *Frontiers in Cardiovascular Medicine*, Vol. 2022, 1-10
2. Khaldoon M. Alawneh, Omar A. Saleh, **Mahmoud M. Smadi**, Fatima Kamel Ababneh, Ikhlas Hamed Ali Mahmoud, Areje M. Smadi, and Diala Alawneh, (2023) Pattern of Uveitis in a Tertiary Hospital in North Jordan and the Impact of Behcet's Disease, *Journal of Ophthalmology*, Vol. 2023, 1-6.
3. Kefah Al-Hayk, Suha Aqaileh, **Mahmoud M. Smadi**, Ahmed Yassin, Belal Aldabbour, Majdi, Raid Kofahi, Samah Elamassie, Khalid El-Salem, (2023), Clinical characteristics and management outcomes of Guillain-Barré syndrome: eight-year experience at a tertiary center in Jordan – a retrospective cohort study, *Annals of Medicine & Surgery* (2023) 3298-3302.
4. Kefah Al-Hayk, **Mahmoud M Smadi**, Lina M Elsalem, Ahmed Yassin, Suha Aqaile, Deema H Obiedat, Ahmad Kefah Al-Hayk, Majdi Al Qawasmeh, Raid Kofahi, Khalid El-Salem, (2023), Effect of 2% Topical Lidocaine Gel on Discomfort from Electrical Stimulation During Nerve Conduction Studies- A Prospective Double-Blind Placebo-Controlled Study, *Local and Regional Anesthesia* 2023:16 153–163.

5. Muhannad J Ababneh, **Mahmoud Mustafa Smadi**, Abdullah Al-Kasasbeh, Qutaiba Ali Jawarneh, Mohammad Nofal, Mohanad El-Bashir, Mohamad Ismail Jarrah, Liqaa A Raffee, (2023), Validity of TIMI Risk Score and HEART Score for Risk Assessment of Patients with Unstable Angina/ Non-ST Elevation Myocardial Infarction Presented to an Emergency Department in Jordan, *Open Access Emergency Medicine* 2023:15 465–471.
6. Alia Alawneh, Fadi Abu Farsakh, **Mahmoud Smadi**, Shaher Samrah, Validating LENT score in malignant pleural effusion, 2023, *Future Science. OA* (2024) FSO958.
7. **Mahmoud M. Smadi**, (2023), Progressive Type-II Censoring Ailamujia distribution Under Binomial Removals with Applications, *Journal of Applied Mathematics & Information Sciences*, 17(1), 1-5.
8. **Mahmoud M. Smadi** and Saiful Islam, Ansari, (2022), Ailamujia Inverted Weibull Distribution with Applications to Lifetime Data, *Pakistan Journal of Statistics*, 38(3), 341-358.
9. Yousef Khawaled, Mahmoud Alrefaei, **Mahmoud Smadi**, Ameen Alawneh, (2022), Designing an Outpatient–Appointment Scheduling Using AHP and Simulated Annealing, *International Journal of Applied Mathematics*, 35(2), 273-287.
10. **Mahmoud M. Smadi**, (2022), Type-II Left Censoring of Some Finite Support Family Lifetime Distributions, *Nonlinear Dynamics and Systems Theory*, 22 (2), 218-229.
11. **Mahmoud M. Smadi**, Ahmad Zghoul, Mahmoud H. Alrefaei, 2021, Progressive Type-II Censoring Power Function Distribution Under Binomial removals, *Nonlinear Dynamics and Systems Theory*, 21 (4), 510–524.
12. **Mahmoud M. Smadi** and Mahmoud H. Alrefaei, 2021, New Extensions of Rayleigh Distribution Based on Inverted-Weibull and Weibull Distributions, *International Journal of Electrical and Computer Engineering*, Vol. 11, No. 6, 5107-5118.
13. **M. M. Smadi** and A. A. Jaradat, (2021), System Reliability of Ailamujia Model and Additive Failure Rate Models, *Nonlinear Dynamics and Systems Theory*, 21 (2), 193–201.

- 14. Mahmoud M. Smadi**, Saiful Islam Ansari, Ahmed A. Jaradat, (2019), Reliability Estimation for the Randomly Censored Pareto Distribution, *International Journal of Electrical and Computer Engineering*, Vol. 9, No. 4 Part II, pp. 3272-3278.
- 15. Lou'i Al-Husinat**, Mokeem Nusir, Haitham AL-Gharaibeh, Amer A. Alomari, **Mahmoud M. Smadi**, Denise Battaglini, Paolo Pelosi, (2022), Post-COVID-19 Syndrome Symptoms After Mild and Moderate SARS-CoV-2 Infection, *Frontiers in Medicine Journal: Pulmonary Section*, Vol. 2022, 1-7.
- 16. Shadi Hamouri**, Shaher M Samrah, Omar Albawaih, Zidan Saleh, **Mahmoud M Smadi**, Ahmad Alhazymeh, Sebawe Syaj (2021). Pulmonary Barotrauma in COVID 19 Patients: Invasive versus Noninvasive Positive Pressure Ventilation, *International Journal of General Medicine*, 14, 2017-2032.
- 17. Khaldoon M. Alawneh**, Wafa Y. Madanat, Diala Alawneh, **Mahmoud M. Smadi** (2020) Prevalence of rheumatoid arthritis among hospital workers in the north of Jordan: Preliminary report of a hospital-based cohort study. *Annals of Medicine and Surgery*, 60, 579–582.
- 18. Mamoon H Al-Omari**, Khaleel Qararha, Mohammed Garaleh, **Mahmoud M Smadi**, Mohammed Bani Hani, Mwaffaq Elheis, 2019, Mesenteric panniculitis: comparison of computed tomography findings in patients with and without malignancy, *Clinical and Experimental Gastroenterology*, Vol. 12 1–8.
- 19. Ashraf O. Oweis**, Sameeha A Alshelleh, Ammar K Daoud, **Mahmoud M Smadi**, Karem H Alzoubi, 2018, Inflammatory milieu in contrast-induced nephropathy: a prospective single-center study, *International Journal of Nephrology and Renovascular Disease*, Vol. 11, 211–215.
- 20. Mohd Shara**, Sidney J. Stohs, and **Mahmoud M. Smadi**, 2017, Safety evaluation of p-syneprine following 15 days of oral administration to healthy subjects: A clinical study, *Physiotherapy Research Journal*, 32, 125-131.
- 21. Wafa Madanat**, Khaldoon Alawneh, **Mahmoud Smadi**, Salwa Saadeh, Muntasser Omari, Anas Bani Hani, Hassan Yazici, 2017, The prevalence of Behcet's disease in the north of Jordan :A hospital-based epidemiological survey, *Journal of Clinical and Experimental Rheumatology*, 35, (Suppl. 108), 51-54.

22. M. Khasawneh, **M. Smadi**, Habtamu Zelelew, 2015, Investigation of factors influencing wavelet-based macrotexture values for HMA pavements, *Road Material and Pavement Design*, Vol. 17, No. 3, 779-791.
23. Khaldoun M. Alawneh, Basheer Y. Khasawneh, Mahmoud H. Ayesh, and **Mahmoud Smadi**, 2014. Rheumatoid Arthritis in Jordan: A Cross Sectional Study of Disease Severity and Associated Co-morbidities. *Journal of Therapeutics and Clinical Risk Management*, Vol. 10, 363-366.
24. Khaldoun M. Alawneh, Mahmoud H. Ayesh, Basheer Y. Khassawneh, Salwa Shihadeh Saadeh, **Mahmoud Smadi**, Khaldoun Bashaireh, 2014. Anti-TNF therapy in Jordan: a focus on severe infections and tuberculosis, *Journal of Biologics Targets and Therapy*, Vol. 8, 193-198.
25. **Mahmoud M. Smadi** and Amel Al-Hosban, 2013. A Multi-Stage Procedure of Bayes Estimation for First Order Moving Average Model, *International Journal of Advanced Statistics and Probability*, Vol. 1, No. 3, 88-91.
26. **Mahmoud M. Smadi** and M. T. Alodat, 2011, Bayesian Threshold Moving Average Models, *Journal of Modern Applied Statistical Methods*, Vol. 10, No. 1, 262-267.
27. **Mahmoud M. Smadi** and Ahmed A. Abu-Taleb, 2009, Empirical Power Comparisons of Some Tests for Low Order Threshold Models, *International Mathematical Forum*, Vol. 4, No. 1, 39-47.
28. **Mahmoud M. Smadi** and Ahmed A. Abu-Taleb, 2008, A Simulation Study of Bayes Estimates of Invertible MA(1) Model. *International Journal of Applied Mathematics*, Vol. 21, No. 2, 179-185.
29. Adnan Al-Smadi and **Mahmoud M. Smadi**, (2007), Signal Reconstruction Using Cepstrum of Higher Order Statistics. *International Journal of Information and Communication Engineering*, Vol. 3, No.1, 52-57.
30. Ahmed A. Abu-Taleb and **Mahmoud M. Smadi**, 2007, Estimation of life time distributions from a record of failures and follow-ups: A simulation study. *International Journal of Applied Mathematics*, Vol. 20, No. 5, 703-712.
31. Ahmed A. Abu-Taleb, **Mahmoud M. Smadi**, Ameen Alawneh, 2007, Bayes Estimation of the Survival Functions Estimators for the Exponential Distribution. *Journal of Mathematics and Statistics*, Vol. 2 No. 4, 422-426.

32. Ahmed A. Abu-Taleb, Ameen Alawneh, **Mahmoud M. Smadi**, 2007, Statistical Analysis of Recent Changes of Relative Humidity in Jordan, *American Journal of Environmental Sciences*, Vol. 3, No. 2, 75-77.
33. **Mahmoud M. Smadi** and Farouq S. Mjalli, 2007. Forecasting Air Temperatures Using Time Series Models and Feed- Forward Neural Networks, *Journal of Mathematics and Statistics*, Vol. 3, No. 2, 44-48.
34. **Mahmoud M. Smadi**, 2006. Observed Changes in Minimum and Maximum Temperatures in Jordan, *American Journal of Environmental Sciences*, Vol. 2, No. 3, 114-120.
35. **Mahmoud M. Smadi** and Ahmed Zghoul, 2006. A Sudden Change in Rainfall Characteristics in Amman, Jordan During the mid-1950s, *American Journal of Environmental Sciences*, Vol. 2, No. 3, 84-91.
36. **Mahmoud M. Smadi** and Ahmed A. Abu-Taleb, 2006. On Bayes Estimation of First Order Moving Average Model. *Journal of Mathematics and Statistics*, Vol. 2, No. 3, 422-426.
37. Ahmed A. Abu-Taleb and **Mahmoud M. Smadi**, 2006. Asymptotic Efficiencies of the Survival Functions Estimators for the Exponential Distribution. *International Mathematical Forum*, Vol. 1, No. 38, 1861-1869.
38. Adnan Al-Smadi and **Mahmoud M. Smadi**, 2003, Phase and Magnitude Extraction Using Cepstrum and Higher Order Statistics, *10-th IEEE International Conference on Electronics Circuits and Systems Proceedings*, Vol. 1, 52-55.
39. Adnan Al-Smadi and **Mahmoud M. Smadi**, (2003) A Study of the Reliability of a Binary Symmetric Channel Under Non-Gaussian Disturbances, *International Journal of Communication Systems*, Vol. 16, No. 1, 893-908.
40. **Mahmoud M. Smadi** and A. A. Abu-Taleb. (2001). Bayes Estimation of Binary Time Series, *Journal of Statistics and Management Systems*, Vol. 4, No.1, 65-71.

**Statistical Packages:**

- SPSS, MINITAB, FORTRAN PowerStation (IMSL), SAS, R

**Courses taught at Jordan University of Science & Technology:**

1. Math. 101 (Calculus-1)
2. Math. 102 (Calculus-2)
3. Math. 102A (Mathematics for Biological Sciences)
4. Math. 131 (Principles of Statistics)
5. Math. 230 (Introduction to Probability)
6. Math. 233 (Probability and Statistics for Computer Science)
7. Math. 235 (Probability and Statistics for Engineering)
8. Math. 330 (Mathematical Statistics)
9. Math. 331 (Statistical Methods (1))
10. Math. 332 (Sampling Techniques)
11. Math. 339 (Time Series Analysis)
12. Math. 350 (Mathematical Modeling)
13. Math. 470 (Probability Models in Operations Research)
14. Math. 491 (Special Topics in Applied Mathematics)
15. Math. 731 (Probability Theory) (*Graduate Course*)

**Courses taught at The University of Qatar:**

1. Math 151 (Introduction to Applied Statistics)
2. Math. 153 (Elementary Statistics)
3. Math. 155 (Statistics for Business (1))
4. Math. 254 (Statistics for Business (2))
5. Math. 350 (Introduction to Probability and Statistics)
6. Math. 353 (Statistical Methods (2))
7. Math. 453 (Statistical Packages (SAS, MINITAB, and SPSS))

**Courses taught at The University of Tabuk:**

1. STAT 301 General Statistics
2. STAT 311 Probability Theory
3. STAT 350 Probability and Statistics
4. STAT 360 Biostatistics



### **Supervisor and Co-advisor/Master Students:**

1. Amal Al-Hosban, 2010, A Simulation Study of the Estimators of First Order Moving Average Model.
2. Waed Al-Amarat, 2021, An Extension of Generalized Uniform Distribution Based on a Sub Model of Kumaraswamy Distribution.
3. Yousef Khawaled, 2021, Designing an Efficient Appointment System for a Clinic Department as a Multi-Objective Optimization.
4. Hind Alnaser, 2022, Hybrid and Type-II Progressive Censoring for Inverted Ailamujia Distribution.