

Maalee N. AlMheidat
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PROFESSIONAL EXPERIENCE

University of Jordan, Amman, Jordan

Sept 2024 - present Assistant Professor/Department of Mathematics

University of Petra, Amman, Jordan

Sept 2015-2024 Assistant Professor/Department of Mathematics

Sept 2017-Sept 2019 Assistant to the dean for quality assurance

Central Michigan University, Mount Pleasant, MI, USA

August 2011-May 2015 Teaching and Research Assistant

August 2008-June 2010 Doctoral Research Fellowship

(Summer 2009. Summer 2010) Teaching Assistant

Yarmouk University, Irbid, Jordan

August 2007– August 2008 Instructor

ACADEMIC QUALIFICATION

Doctor of Philosophy (Statistics) May 2015.

Master of Arts December 2010.

Central Michigan University, Mount Pleasant, MI, USA

Dissertation title: Some generalized families of Weibull distribution

Supervisors: Felix Famoye, Carl Lee

Bachelor of Science in Mathematics

June 2007

Yarmouk University, Irbid, Jordan

RESEARCH INTERESTS:

Generalizing statistical distributions arising from quantile functions, statistical inference of probability models, divergence measures, Bayesian analysis, data sciences, big data analysis, special functions, estimation and approximation.

ACADEMIC SCHOLARSHIPS

- King Abdullah center for excellence scholarship, B.Sc. degree, Yarmouk University, Jordan (2003-2007).
- Central Michigan University Doctorate Research Fellowship for the 2008-2009, 2009-2010 academic years.
- Central Michigan University Doctorate teaching assistantship for the 2011-2015 academic years.
- Mathematical Sciences Research Institute (MSRI) award to participate in the Workshop “Critical issues in education: Teaching Undergraduates Mathematics”, Berkeley, CA, May 11-13, 2009.

ACADEMIC RECOGNITIONS AND AWARDS

- Recognized under the auspices of His Majesty King Abdullah II bin Al-Hussein for being an outstanding student graduated from Yarmouk University with highest GPA for the academic year 2006-2007.

- The first rank in the universal ETS mathematics exam among 400 Mathematic Jordanian students for the academic year 2006-2007.
- Recognition from Yarmouk University for being an outstanding student, with the highest cumulative GPA for the first and second semesters of the academic years 2003-2004, 2004-2005, 2005-2006, and 2006-2007.
- Honor list, Yarmouk University, Irbid, Jordan (2003-2004, 2004-2005, 2005-2006, and 2006-2007).
- Many travel and accommodation awards from the University of Petra; to present papers in international conferences and to attend workshops.

SOME SELECTED PUBLICATIONS:

- 1) S. Alhihi, **M. Almheidat**, G. Abufoudeh, R. Abu Awwad, S. Alokaily and A. Almomani. (2024). Statistical Inference of Normal Distribution Based on Several Divergence Measures: A Comparative Study. *Symmetry*, 16(2), 212. (**SCIE, Scopus, Q1**)
- 2) **M. Almheidat**, M. AlQudah and S. Alhihi, (2023). New family of generalized Lindley distributions, *AIP Conference Proceedings*, *Accepted*. (**Scopus**)
- 3) M. AlQudah and **M. Almheidat**. (2023). Construction of Generalized Chebyshev Type Polynomials on Simplex in k-Dimensional, *AIP Conference Proceedings*, *Accepted*. (**Scopus**)
- 4) S. Alhihi, **M. Almheidat**. (2023). Estimation of Pianka Overlapping Coefficient for Two Exponential Distributions. *Mathematics*, 11(19), 4152. (**SCIE, Scopus, Q1**)
- 5) M. AlQudah and **M. Almheidat**. (2022). Characterization of Generalized Jacobi Polynomials Using Bernstein Basis, *AIP Conference Proceedings*, *Accepted in press*. (**Scopus**)
- 6) M. AlQudah, **M. Almheidat** and T. Hamadne. (2021). Bivariate generalized shifted Gegenbauer orthogonal system, *Journal of Mathematics*, 2021, 1-9. (**SCIE, Scopus, Q2**)
- 7) M. AlQudah and **M. Almheidat**. (2020). Recurrence relation for generalized shifted Chebyshev Koornwinder's type polynomials, *AIP Conference Proceedings* 2293, 170002. (**Scopus**)
- 8) M. AlQudah and **M. Almheidat**. (2018). Generalized Shifted Chebyshev Koornwinder's Type Polynomials: Basis Transformations. *Symmetry*. 10 (12). (**SCIE, ISI, Scopus, Q1**)
- 9) **M. Almheidat**, K. AyyalSalman and M. AlQudah. (2018). Cubature formula for bivariate generalized Chebyshev Koornwinder's type polynomials, *AIP Conference Proceedings* 1978, 050004. (**Scopus**)
- 10) M. AlQudah, **M. Almheidat**, Y. AlJarrah, M. AlJarrah and A. Al-Kazwini, A. (2018). A recursive relation for generalized Ultraspherical type orthogonal polynomials, *AIP Conference Proceedings* 1978, 050002. (**Scopus**).
- 11) K. AyyalSalman, **M. Almheidat** and M. AlQudah. (2017). Cubature formula for the generalized Chebyshev type polynomials. *International Journal of Pure and Applied Mathematics*. 112(3). (**Scopus**).
- 12) **M. Almheidat** and M. AlQudah. (2017). Characterization of generalized Jacobi Koornwinder's type polynomials. *AIP Conference Proceedings*. 1863. 060002. (**Scopus**).
- 13) M. AlQudah and **M. Almheidat**. (2017). Generalized Gegenbauer Koornwinder's type polynomials change of bases. *AIP Conference Proceedings*. 1863. 060004. (**Scopus**).
- 14) M. AlQudah and **M. Almheidat**. (2016). Generalized Jacobi-Koornwinder's Type-Bernstein Polynomials Bases Transformations, *International Journal of Mathematic*. 27(11). (**SCI, SCIE, ISI, Scopus**).

- 15) **M. Almheidat**, C. Lee and F. Famoye. (2016). A generalization of the Weibull Distribution with Applications. Journal of Modern Applied Statistical Methods. 15(2). (**Scopus**).
- 16) **M. Almheidat**, F. Famoye and C. Lee. (2015). Some generalized families of Weibull distribution: Properties and applications. International Journal of Statistics and Probability. 4(3).

RESEARCH PROJECT FUND/GRANT:

- Research grant at University of Petra.
M. Almheidat, M. AlQudah, S. Alhihi, A. Almomani, G. Abufoudeh and R. Abu Awaad. New class of generalized Rayleigh distributions based on quantile functions with applications to financial datasets. 5000 JOD.
- Seed Project at German Jordanian University.
M. AlQudah, D. Zeidan, **M. Almheidat** and H. Ström. Symbolic and Numerical Algorithms for Simulating Non-Linear Partial Differential Equations: Computations and Applications, 25000 JOD.

SOME SELECTED PRESENTATIONS:

- **M. Almheidat**, M. AlQudah, and S. Alhihi, “New family of generalized Lindley distributions”, International Conference on Numerical Analysis and Applied Mathematics (ICNAAM-2023), Crete, Greece, September 11-15, 2023.
- M. AlQudah and **M. Almheidat**. “Recurrence relation for generalized shifted Chebyshev Koornwinder’s type polynomials”, International Conference on Numerical Analysis and Applied Mathematics (ICNAAM-2020), Crete, Greece, September 11-15 September 2020.
- **M. Almheidat** and M. Alqudah. “New way to generalize probability distributions”, International Conference on Numerical Analysis and Applied Mathematics (ICNAAM-2019), Rhodes, Greece, September 23-28, 2019.
- **M. Almheidat** and M. AlQudah, “Characterization of generalized Jacobi Koornwinder's type polynomials”, International Conference on Numerical Analysis and Applied Mathematics (ICNAAM-2017), Rhodes, Greece, September 25-30, 2017.
- M. AlQudah and **M. Almheidat**, “Generalized Gegenbauer Koornwinder's type polynomials change of bases”, International Conference on Numerical Analysis and Applied Mathematics (ICNAAM-2016), Rhodes, Greece, September 19-25, 2016.
- **M. Almheidat**, C. Lee and F. Famoye. “A generalization of Weibull distribution with applications”, International Conference on Numerical Analysis and Applied Mathematics (ICNAAM-2016), Rhodes, Greece, September 19-25, 2016.
- **M. Almheidat**, F. Famoye, and C. Lee, "Some generalized families of Weibull distribution", Central Spring Sectional Meeting, Michigan State University, East Lansing, MI, March 14-15, 2015.

ACADEMIC SERVICES

- Member, Technical Program Committee (TPC), The 7th International Conference on Mathematics and Statistics (ICoMS 2024), Amarante, Portugal, June 23-25, 2024.

REFERENCES

References are available upon request.