CURRICULUM VITAE TEMPLATE



Position/Designation: Assistant Professor Department: Mathematical and Physical Sciences College: Art and Sciences University of Nizwa, Sultanate of Oman

Personal Information

Name: Ashkan Khalifeh Marital Status: Married Email Address: <u>a.khalifeh@unizwa.edu.om</u> Contact Numbers: (+968) 98229028

Academic Qualifications

- Ph.D., (Statistics) Yazd University, Yazd, Iran 2014 2019 Thesis Title: New Approaches for Estimating Reliability Parameter under Stress-Strength Model
- M.Sc., (Mathematical Statistics) University of Isfahan, Isfahan, Iran, 2012 2014 Dissertation Title: Multivariate finite mixture distributions with skew-t components
- B.Sc., (Statistics) University of Isfahan, Isfahan, Iran 2008 2012 Dissertation Title: Generalized linear model using MATLAB

Teaching Activities, Current/Previous Experience

Extensive teaching background in statistics, covering both theoretical and applied aspects across various academic institutions.

Courses Taught:

Introduction to statistics Principles of Probability Mathematical Statistics Statistical Methods Statistical Inference Sampling Techniques Applied Statistics Regression Models Generalized Linear Models (GLM) Bayesian Analysis Reliability Analysis Statistical Computing & Software

Research Activities

(includes but not limited to research interests, conference attendance, conference presentations and publications: refereed journal, articles, books, etc.)

Research Interests:

Focused on both theoretical advancements and practical applications, the research interests span a wide array of statistical domains:

- Statistical Learning & Explainable AI (XAI):
- Sequential Analysis
- Distribution Theory
- Reliability & Stress-Strength Models
- Numerical Methods

These research interests aim to advance both theoretical knowledge and practical solutions in various fields, including statistics, engineering, bioinformatics, and data science.

Publications:

Medina-Ortiz, D., **Khalifeh, A**., Anvari-Kazemabad, H., Davari D.M. (bioRxiv 2024) Interpretable and explainable predictive machine learning models for data-driven protein engineering. bioRxiv 2024.02.18.580860.

Heydari, M., **Khalifeh, A**., Rathour L. (2023) A simple and efficient preprocessing step for convex hull problem. Discrete Mathematics, Algorithms and Applications, DOI: <u>https://doi.org/10.1142/S179383092350091X</u>.

Mahmoudi, E., Nemati, Z., **Khalifeh, A**. (2023) Two-stage estimation of the combination of location and scale parameter of the exponential distribution under the constraint of bounded risk per unit cost index. Sequential Analysis, 42:3, 211-227, DOI: https://doi.org/10.1080/07474946.2023.2201607.

Al-Hemyari, A.Z., **Khalifeh, A**. (2023) On shrunken estimators for the ratio of scale parameters in the exponential two-sample problem. International Journal of Mathematical Modelling and Numerical Optimisation. <u>https://doi.org/10.1504/IJMMNO.2023.132291</u>.

Mahmoudi, E., Nemati, Z., **Khalifeh, A.** (2022). Bounded risk per unit cost index constraint for sequential estimation of the mean in a two-parameter exponential distribution, Sequential Analysis, <u>https://doi.org/10.1080/07474946.2022.2074453</u>.

Khalifeh, A., Mahmoudi, E. and Chaturvedi, A. (2020). Sequential fixed-accuracy confidence intervals for the stress–strength reliability parameter for the exponential distribution: two-stage sampling procedure. Computational Statistics, DOI: <u>https://doi.org/10.1007/s00180-020-00957-5</u>.

Nekoukhou, V., **Khalifeh**, **A**., Bidram, H. (2020). Univariate and Bivariate Extensions of the Generalized Exponential Distributions. Mathematica Slovaca. <u>https://doi.org/10.1515/ms-2021-0073</u>.

Nekoukhou, V., **Khalifeh, A**., Bidram, H. (2020). A Bivariate Discrete Inverse Resilience Family of Distributions with Resilience Marginals. Journal of Applied Statistics.

https://doi.org/10.1080/02664763.2020.1755618.

Mahmoudi, E., **Khalifeh, A**., and Nekoukhou, V. (2019) Minimum risk sequential point estimation of the stress-strength reliability parameter for exponential distribution, Sequential Analysis, DOI: <u>https://doi.org/10.1080/07474946.2019.1649347</u>.

Mahmoudi, E., Roughani, G., **Khalifeh, A.** (2019). Bounded Risk Estimation of the Gamma Scale

Parameter in a Purely Sequential Sampling Procedure. Journal of Statistical Theory and Applications, DOI: <u>https://doi.org/10.2991/jsta.d.190818.005</u>

Khalifeh, A., Mahmoudi, E., Dolati, A. (2019). Sequential-based approach for estimating the stressstrength reliability parameter for exponential distribution. Journal of The Iranian Statistical Society. <u>http://dx.doi.org/10.29252/jirss.19.1.85</u>.

Mahmoudi, H., Mahmoodian, E., and **Khalifeh, A**. (2018) Bivariate normal-power series class of distribu-tions: model, properties and applications. Electronic Journal of Applied statistical Analysis, DOI: <u>https://doi.org/10.1285/i20705948v11n2p546</u>.

Lalehzari, R., Mahmoudi, E., and **Khalifeh, A.** (2017). Sequential fixed-width confidence interval for the rth power of the exponential scale parameter: Two-stage and sequential sampling procedures. Sequential Analysis, DOI: https://doi.org/10.1080/07474946.2018.1548841

Nekoukhou, V., **Khalifeh, A.,** Mahmoudi, A. (2019- Text in Persian) Bivariate Rayleighgeometric distribution. JSS. 2020; 13 (2) :539-555, DOI: <u>http://dx.doi.org/10.29252/jss.13.2.53</u>

Ph.D. Thesis Advisor:

Sequential Point Estimation for the Linear Combination of Location and Scale Parameters of the Exponential Distribution. Yazd university, Yazd, Iran, 2023 (Zahra Nemati).

Faculty Administrative Experience

Community Services

Consultancy

Membership in Professional Bodies

Permanent member of the Iranian Statistical Society

Awards and Recognitions

Ranked 27th Place in Nationwide Statistics M.Sc. Entrance Examination. (2012). Ranked 64th Place in Nationwide Statistics Ph.D. Entrance Examination (2014)