

# **CURRICULUM VITAE**

# **Reza Pakyari**

**Associate Professor of Statistics**

## **ADDRESS**

Department of Mathematics and Statistics, College of Arts and Sciences, Qatar University, Doha, Qatar.

**Email:** rpakyari@qu.edu.qa

**Phone:** (+974) 4403 7548

## **EDUCATION**

2005	Ph.D.	Statistics	The Australian National University	Australia
		<i>Thesis Title:</i> Nonparametric Inference In Multivariate Mixtures		
		<i>Supervisor:</i> Prof. Peter Hall		
1993	M.S.	Statistics	Shiraz University	Iran
1990	B.S.	Statistics	Shahid Chamran Ahwaz University	Iran

## **EXPERIENCE**

2019-Present	Associate Professor	Department of Mathematics and Statistics	Qatar University	Qatar
2016-2019	Associate Professor	Department of Mathematics	Arak University	Iran
2006-2016	Assistant Professor	Department of Mathematics	Arak University	Iran

## **VISITING POSITION HELD**

Visiting Professor, Department of Mathematics and Statistics, McMaster University, Hamilton, Ontario, Canada, Aug. 2010- Aug. 2011.

## **REFERRED JOURNAL PUBLICATIONS**

Kohansal, A., and Pakyari, R. (2026). Reliability assessment of heterogeneous Dagum-distributed multi-component stress-strength systems under adaptive hybrid progressive censoring. *Journal of Computational and Applied Mathematics*, **479**, 117238. <https://doi.org/10.1016/j.cam.2025.117238>.

Saaidia. N., Pakyari, R. and Zeghdoudi, H. (2026). The Q-Lindley Distribution: Goodness-of-Fit Tests, Modeling, Inference, and Applications. *Journal of Statistical Theory and Applications*, **25**, 6. <https://doi.org/10.1007/s44199-025-00148-5>

Pakyari, R. and Zeghdoudi, H. (2025). Entropy-Based Characterization, Astronomical Applications, and Bayesian Hierarchical Modeling of the New X-Lindley Distribution. *Arabian Journal of Mathematics*.  
<https://doi.org/10.1007/s40065-025-00588-y>.

Badwan, R. and Pakyari, R. (2025). Analyzing Competing Risks with Progressively Type-II Censored Data in Dagum Distributions. *Axioms*, **14**(7), 508. <https://doi.org/10.3390/axioms14070508>.

Kohansal, A., Bakouch, H. and Pakyari, R. (2025). Reliability inference for multicomponent stress-strength systems with heterogeneous Lomax-distributed components under progressive censoring. *Scientific Reports*, **(15)** 1-17. <https://doi.org/10.1038/s41598-025-00846-1>.

Soubra, L., Aref, F., Pakyari, R. and Al- Jabiry, H. (2025). Determinants of Single-Use Plastic Bottled Water Consumption Among University Students: A Cross-Sectional Study. *Journal of Environmental Management*, **(386)** 1-10. <https://doi.org/10.1016/j.jenvman.2025.125800>.

Haddari, A., Zeghdoudi, H. and Pakyari, R. (2025). A new two-parameter family of discrete distributions. *Helion*, **11**(3), 1-11. <https://doi.org/10.1016/j.heliyon.2024.e41459>.

Chesneau, C., Pakyari, R., Kohansal, A. and Bakouch, H. (2024). Estimation and prediction under different schemes for a flexible symmetric distribution with applications. *Journal of Mathematics*, 1-18. <https://doi.org/10.1155/2024/6517277>.

Benatmane, C., Zeghdoudi, H. and Pakyari, R. (2024). Modified Poisson Process: Properties and Application in Ruin Model. *Lobachevskii Journal of Mathematics*. **45**(9), 4050–4059. <https://doi.org/10.1134/S1995080224604806>.

Pakyari, R. (2023). Goodness-of-fit Testing Based on Gini Index of Spacings for Progressive Type-II Censored Data. *Communications in Statistics-Simulation and Computation*, **52**(7), 3223-3232, <https://doi.org/10.1080/03610918.2021.1930052>

Pakyari, R. and Al-Hamad, O. (2023). On Testing Exponentiality under Type I Censoring. *Frontiers in applied mathematics and statistics*, **9**, 1-12. <https://doi.org/10.3389/fams.2023.1113477>

Pakyari, R. and Baklizi, A. (2022). On Goodness-of-Fit Testing for Burr Type X Distribution under Progressively Type-II Censoring. *Computational Statistics*, **37**, 2249-2265, <https://doi.org/10.1007/s00180-022-01197-5>.

Ghafari, S., HabibiRad, A., Yousefzadeh, F. and Pakyari, R (2020). Non-Bayesian Estimation and Prediction under Interval Censoring. *Journal of Statistical Research of Iran*, **17**, 171-190.

Pakyari, R. and Resalati Nia, K. (2017). Testing Goodness-of-fit for Some Lifetime Distributions with Conventional Type-I Censoring. *Communications in Statistics-Simulation and Computation*, **46** (14), 2998-3009. <https://doi.org/10.1080/03610918.2015.1069347>

Mohammadi, A., Abnosi, M.H. and Pakyari, R. (2017). Low Concentration of Sodium Nitroprusside Promotes Mesenchymal Stem Cell Viability and Proliferation Through Elevation of Metabolic Activity. *Avicenna Journal of Medical Biochemistry*, **5**, 9-16. DOI:10.15171/ajmb.2017.02.

Pari, S., Abnosi, M.H. and Pakyari, R. (2017). Sodium Nitroprusside Changed The Metabolism of Mesenchymal Stem Cells to An Anaerobic State while Viability and Proliferation Remained Intact. *Cell Journal*, **19**, 146-158. doi: 10.22074/cellj.2016.4875.

Pakyari, R. and Habibi, D. (2016). On Comparison of Survival Curves with Interval Censored Data. *Jordan Journal of Mathematics and Statistics*, **9**, 203-215.

Park, S. and Pakyari, R. (2015). Cumulative Residual Kullback-Leibler Information with the Progressively Type-II Censored Data. *Statistics and Probability Letters*, **106**, 287-294. <https://doi.org/10.1016/j.spl.2015.07.029>

Pakyari, R. and Balakrishnan, N. (2013b). Testing Exponentiality Based on Type-I Censored Data. *Journal of Statistical Computation and Simulation*, **83** (12), 2369-2378. <https://doi.org/10.1080/00949655.2012.691974>

Pakyari, R. and Balakrishnan, N. (2013a). Goodness-of-Fit Tests for Progressively Type-II Censored Data from Location-Scale Distributions. *Journal*

of Statistical Computation and Simulation, **83** (1), 167-178.  
<https://doi.org/10.1080/00949655.2011.625424>

Pakyari, R. and Balakrishnan, N. (2012). A General Purpose Approximate Goodness-of-fit Test for Progressively Type-II Censored Data. *IEEE Transactions on Reliability*, **61**, 238-244. DOI: 10.1109/TR.2012.2182811.

Pakyari, R. (2012). Inference for the Geometric Extreme Exponential Distribution under Progressive Type-II Censoring. *ISRN Probability and Statistics*, 1-15.

Pakyari, R. (2011). Nonparametric mixture analysis of rock crab of the genus Leptograpsus. *Journal of Applied Statistics*, **38**, 581-589.  
<https://doi.org/10.1080/02664760903521468>

Pakyari, R. (2010). Discriminating between generalized exponential, geometric extreme exponential and Weibull distributions. *Journal of Statistical Computation and Simulation*, **80**, 1403-1412. <https://doi.org/10.1080/00949650903173306>

Pakyari, R. (2009). A note on asymptotic behavior of the nonparametric density estimators in multivariate mixtures. *Communications in Statistics – Theory and Methods*, **38**, 1219-1223. <https://doi.org/10.1080/03610920802384284>

Pakyari, R. (2008). On bagging and estimation in multivariate mixtures. *Metodolski Zvezki, Advances in methodology and statistics*, **5**, 9-18.

Hall, P., Neeman, A., Pakyari, R. and Elmore, R. (2005). Nonparametric inference in multivariate mixtures. *Biometrika*, **92**, 667-678.  
<https://doi.org/10.1093/biomet/92.3.667>

## CONFERENCE PRESENTATIONS

Pakyari, R. (2025), On the Stress-Strength Models for the Dagum Distribution under Adaptive Type-II Progressively Hybrid Censoring, *17<sup>th</sup> German Probability and Statistics Days 2025, GSPD 2025*, TU University, Dresden, Germany.

Pakyari, R. (2022), The Use of Spacings in Goodness-of-Fit Testing, *16<sup>th</sup> Iranian Statistics conference*, University of Mazandaran, Iran.

Pakyari, R. (2021), A goodness-of-fit test based on weighted mean of spacings for progressively Type-II censored data, *13<sup>th</sup> Seminar on Probability and Stochastic Processes*, Hakim Sabzevari University, Iran.

Ahmad, S., Baklizi, A.S., Pakyari, R. (2021), Goodness-of-Fit testing for the log-logistic distribution based on Type-I censored data, Istanbul: Yildiz Technical University. Turkey.

Pakyari, R. (2018), Testing Goodness-of-Fit based on Type-I censored data, *14<sup>th</sup> Iranian Statistics conference*, Shahrood, Iran.

Pakyari, R. (2008), Nonparametric methods for density estimation in multivariate mixtures, *Applied Statistics International conference*, Bled, Slovenia.

Pakyari, R. (2007), On Bagging and estimation in multivariate mixtures, *Applied Statistics International conference*, Bled, Slovenia.

Pakyari, R. (2007), Nonparametric estimation of the component density functions in multivariate mixtures, *Joint Statistical meeting and international conference on Statistics, Probability and related areas*, Cochin, India.

Pakyari, R. (2007), Bagging and Subagging in Mixture Models, *38th Annual Iranian Mathematics Conference*, Zanjan, Iran.

Pakyari, R. (2006), Nonparametric density estimation in multivariate mixtures, *37th Annual Iranian Mathematics Conference*, Tabriz, Iran.

Pakyari, R. (2005), Nonparametric estimation of mixing proportion and component distribution in multivariate mixtures, *25th European Meeting of Statisticians*, Oslo, Norway.

Pakyari, R. (1996), *Parameter estimation in the Weibull distribution*, Third Iranian Statistics Conference, Tehran, Iran.

### **BOOKS/CHAPTER(S)**

Pakyari, R. and Gardner, H. (2008), An Introduction to R for human computer interaction and usability engineering, *Supporting document for courses COMP6390 and COMP3900 in the Australian National University*.

Pakyari, R. (2008), Dictionary of Statistics, *Arak University Publications*, In Persian.

### **RESEARCH GRANTS**

Investigators	Topic	Source	Year
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R. Pakyari	Grant Number: QUST-2-CAS-2023-1537 "Competing Risks Survival Analysis for Cancer Patients in Presence of Progressively Type-II Censoring"	Qatar University	2023
R. Pakyari K. Kavousi	Trend survey of fatal road traffic accidents in Markazi province.	Iranian Legal Medicine Organization	2014
R. Pakyari	Goodness-of-fit Tests Based On Type-I Censored Data	Research Deputy of Arak University, Arak, Iran.	2012
R. Pakyari	Point and Interval Estimation for the Geometric Extreme Exponential Distribution Based On Progressively Type-II Censored Data	Research Deputy of Arak University, Arak, Iran.	2010
R. Pakyari	Bootstrap Goodness of Fit Tests for Lifetime Distributions	Research Deputy of Arak University, Arak, Iran.	2009
A. R. Bahrami R. Pakyari H. Khalaji	Standardization of the psycho-motor test of force control and preferred hands angle regulation of Arak Universities students	Research Deputy of Arak University, Arak, Iran.	2009
R. Pakyari	Discriminant Analysis of Reliability Models	Research Deputy of Arak University, Arak, Iran.	2007
R. Pakyari	On Bagging and Estimation in Multivariate Mixtures	Research Deputy of Arak University, Arak, Iran.	2007
R. Pakyari	A new method of nonparametric density estimation in multivariate mixtures	Research Deputy of Arak University, Arak, Iran.	2006

## AWARDS

1. Scholarship from the Iranian Ministry of Culture and Higher Education for four years study in Ph.D. Statistics program, The Australian National University, Canberra, Australia, 2002-2005.
2. Best researcher in the department of mathematics on 2009, Arak University, Iran.

## TEACHING

### 1. Undergraduate

Course Title	Institution	Year	Text Book
Survival Analysis	Qatar Uni.	2019-2024	<i>Lee &amp; Wang, Statistical Methods for Survival Data Analysis</i>
	Arak Azad Uni.	2008-2011	
Statistical Simulation	Qatar Uni.	2019-2024	Ross, Simulation
Sampling Methods	Qatar Uni.	2021	Scheaffer, Mendenhall, Ott, Gerow, Survey Sampling
Nonparametric Statistics	Qatar Uni.	2020, 2023	<i>Higgins, Introduction to Modern Nonparametric Statistics</i>
	Arak Payam Noor Uni.	2006-2008	
Mathematical Statistics I & II	Qatar Uni.	2021-2024	1. Ferund, <i>Mathematical Statistics with Applications</i> .  2. Mood et al., <i>Introduction to the Theory of Statistics</i> .
	Arak Uni. & Arak Payam Noor Uni.	2006-2016	
Applied Regression Analysis	Qatar Uni.	2023-2024	1. Montgomery, Peck & Vining; <i>Introduction to Linear Regression Analysis</i> , Wiley, 2012.  2. Draper & Smith, <i>Applied Regression Analysis</i> .
	Arak Azad Uni.	2008-2011	
Categorical Data Analysis	Qatar Uni.	2022	<i>Alan Agresti, An Introduction to Categorical Data Analysis, 2nd edition, 2006, Wiley</i> .
Statistics I	Qatar Uni.	Since 2020	<i>Mendenhall, Beaver and Beaver (2014) Introduction to Probability and Statistics</i> .
Statistical Marketing Research Methods (STAT2003)	The Australian National Uni.	2004	<i>ANU Lecture Notes</i>
Introduction to Probability	Arak Uni.	2006-2017	<i>Ross, A First Course In Probability</i> .
Multivariate Analysis	Arak Azad Uni.	2008-2011	<i>Anderson, An Introduction to Multivariate Statistical Analysis</i>
Probability and Statistics for Engineers	Sistan & Balochistan Uni. and Arak Univ.	1993-2010	<i>Mendenhall, Statistics for Engineering and the Sciences</i>
Biological Statistics I & II	Arak Uni.	2006-2007	<i>Wayne &amp; Chad, Biostatistics: A Foundation For Analysis In The Health Sciences</i>
Calculus and Analytic Geometry	Sistan & Balochistan Uni. and Arak Uni.	1993-2010	<i>Silverman, Modern Calculus and Analytic Geometry</i> .

## 2. Graduate

Course Title	Institution	Year	Text Book
Mathematical Statistics	Qatar Uni.	2020, 2022,	<i>Casella &amp; Berger, Statistical Inference</i> .

		2024	
	Arak Medical Uni. & Arak Azad Uni.	2013-2015	
Linear Models	Qatar Uni.	2021, 2024	Seber & Lee, <i>Linear Regression Analysis</i>
	Arak Azad Uni.	2012-2014	Rencher & Schaalje, <i>Linear Models in Statistics</i>
Advanced Simulation	Arak Uni. & Arak Medical Uni.	2013-2018	Robert & Casella, <i>Introducing Monte Carlo Methods with R.</i>
Survival Analysis	Arak Medical Uni.	2013-2015	Miller, <i>Survival Analysis.</i>
Combinatorial Optimization	Arak Uni.	2014-2018	Zaldivar et al, <i>Advances in Metaheuristics Algorithms: Methods and Applications.</i>

## MASTER STUDENT SUPERVISION

Year	Student's Name	Thesis Title	Level	Role	Institution
2024	Raghd Badwan	Competing Risk Models in Presence of Progressively Type-II censored data for Dagum Distribution	MSc.	Supervisor	Qatar Univ.
2022	Hadeel Makableh	Reliability analysis of Stress-Strength model from truncated Pareto distribution based on progressively type II censored samples	MSc.	Supervisor	Qatar Univ.
2020	Samah Ibrahim	Goodness of fit testing for the log-logistic distribution based on Type I censored data	MSc.	Co-Supervisor	Qatar Univ.
2020	Salman Umer	Exponential model for breast cancer partly interval censored data via multiple imputation	MSc.	Co-Supervisor	Qatar Univ.
2019	Z. Jafari	Application of Optimization Methods in Solving Tray Problem	MSc.	Supervisor	Arak Univ.
2019	M. Abdi	On the solutions of the N-queens problem	MSc.	Supervisor	Arak Univ.
2019	V. Ahmadlo	Newsvendor problem with end-of-period demand and clearance price decision variables	MSc.	Supervisor	Arak Univ.
2018	H. Rabiei	The Late Acceptance Hill Climbing Metaheuristic Algorithm	MSc.	Supervisor	Arak Univ.
2018	Z. Kadivar	Stein lemma for the multivariate generalized hyperbolic distribution and its application in portfolio optimization	MSc.	Supervisor	Arak Univ.

2018	S. Mirzakhani	Optimization of stock levels in rental systems	MSc.	Supervisor	Arak Univ.
2018	F. Jahanara	Optimizing Preventive Maintenance Using Bayesian Failure Rate Modeling	MSc.	Supervisor	Arak Univ.
2018	M. Shiri	An Improvement of the Genetic Algorithm for Solving Traveling Salesman Problem	MSc.	Supervisor	Arak Univ.
2017	F. Basirahmadlou	Optimal control of inventory under random replenishment	MSc.	Supervisor	Arak Univ.
2017	M. Mozaffari	Price control model revenue management using minimax regret under limited information of demand	MSc.	Supervisor	Arak Univ.
2017	A. Rezaei	On the corridor allocation problem using simulated annealing and tabu search methods	MSc.	Supervisor	Arak Univ.
2017	E. Khosravi	Finding all Nash equilibria	MSc.	Advisor	Arak Univ.
2017	A. Deris	Nash equilibria in network creation game	MSc.	Advisor	Arak Univ.
2016	A. Varmaziyari	Optimization of the newsvendor problem based on confidence intervals under random demand	MSc.	Supervisor	Arak Univ.
2016	A. Radman	The solution of the linear assignment problem using ant colony optimization algorithm	MSc.	Supervisor	Arak Univ.
2016	F. Shirin	Optimization of the newsvendor problem with partial information on demand based on minimax regret	MSc.	Supervisor	Arak Univ.
2015	S. Abolhasani	Goodness of fit tests for interval censored data and it's applications in medical data	MSc.	Supervisor	Arak. Med. Univ.
2015	D. Habibi	Estimating the survival function under interval censored data and it's applications in medical data	MSc.	Supervisor	Arak. Med. Univ.

## ***SERVICE***

**I have reviewed papers for several peer-reviewed journals, including:**

Computational Statistics and Data Analysis, *Elsevier*.

Journal of Statistical Computation and Simulation, *Taylor & Francis*.

Communications in Statistics; Theory and Methods, *Taylor & Francis*.

Communications in Statistics; Simulation and Computation, *Taylor & Francis*.

Journal of Business & Economic Statistics, *American Statistical Association*.

Sankhya, *Springer*.

IEEE Transactions on Reliability, *IEEE Xplore*.

Journal of Testing and Evaluation, *ASTM International*.

The Journal of Statistical Mechanics: Theory and Experiment (JSTAT), *Italy*.

International Journal of Computer Mathematics: Computer Systems Theory, *Taylor & Francis*.

Journal of Statistical Sciences, *Iranian Statistical Society*.

### **PROFESSIONAL APPOINTMENT**

2022 – Present: Statistics Program Coordinator, Department of Mathematics and Statistics, Qatar University.

2012 – 2018: Associate Dean, College of Science, Arak University.

2010 – 2012: Head of mathematics department, Arak University.

### **ADDITIONAL WORK EXPERIENCE**

February 2003-June 2005: Teaching Assistance, School of Information Sciences and Engineering, University of Canberra, Canberra, Australia.

June 2005-December 2005: Research Assistance, Mathematical Sciences Institute, The Australian National University, Canberra, Australia.

### **COMPUTER SKILLS**

Statistical Software: R, Python, SPSS, Minitab.

Other software: LaTeX, Microsoft Office.