## **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. Thesis Tita Supervisor:	<b>Statistics</b> <i>le</i> : Nonparametr Prof. Peter Ha	<b>The Australian National University</b> ric Inference In Multivariate Mixtures II	Australia		
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.

#### **REFFERED JOURNAL PUBLICATIONS**

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. <u>https://doi.org/10.1038/s41598-025-00846-1</u>.

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. <u>https://doi.org/10.1016/j.jenvman.2025.125800</u>.

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

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. <u>https://doi.org/10.1134/S1995080224604806</u>.

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,<u>https://doi.org/10.1080/03610918.2021.1930052</u>

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

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, <u>https://doi.org/10.1007/s00180-022-01197-5</u>.

Ghafori, 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. <u>https://doi.org/10.1016/j.spl.2015.07.029</u>

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

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. <u>https://doi.org/10.1080/00949655.2011.625424</u>

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. <u>https://doi.org/10.1080/02664760903521468</u>

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

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. <u>https://doi.org/10.1080/03610920802384284</u>

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. <u>https://doi.org/10.1093/biomet/92.3.667</u>

### **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.

Ahmad, S., Baklizi, A.S., Pakyari, R. (2021), Goodness-of-Fit testing for the loglogistic 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	Торіс	Source	Year
R. Pakyari	Grant Number: QUST-2-CAS-2023- 1537	Qatar University	2023
	"Competing Risks Survival Analysis for		
	Cancer Patients in Presence of		
	Progressively Type-II		
	Censoring"		
R. Pakyari	Trend survey of fatal road traffic	Iranian Legal Medicine	2014
K. Kavousi	accidents in Markazi province.	Organization	
R. Pakyari	Goodness-of-fit Tests Based On Type-I	Research Deputy of Arak	2012
	Censored Data	University, Arak, Iran.	
R. Pakyari	Point and Interval Estimation for the	Research Deputy of Arak	2010
	Geometric Extreme Exponential	University, Arak, Iran.	
	Distribution Based On Progressively	-	
	Type-II Censored Data		
R. Pakyari	Bootstrap Goodness of Fit Tests for	Research Deputy of Arak	2009
	Lifetime Distributions	University, Arak, Iran.	
A. R. Bahrami	Standardization of the psycho-motor	Research Deputy of Arak	2009
R. Pakyari	test of force control and preferred	University, Arak, Iran.	
H. Khalaji	hands angle regulation of Arak		
	Universities students		
R. Pakyari	Discriminant Analysis of Reliability	Research Deputy of Arak	2007

	Models	University, Arak, Iran.	
R. Pakyari On Bagging and Estimation in F		Research Deputy of Arak	2007
-	Multivariate Mixtures	University, Arak, Iran.	
R. Pakyari	A new method of nonparametric	Research Deputy of Arak	2006
-	density estimation in multivariate	University, Arak, Iran.	
	mixtures		

#### 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	Lee & Wang, Statistical Methods
	Arak Azad Uni.	2008-2011	for Survival Data Analysis
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	Higgins, Introduction to Modern
	Arak Payam Noor	2006-2008	Nonparametric Statistics
	Uni.		
Mathematical Statistics I & II	Qatar Uni.	2021-2024	I. Ferund, Mathematical Statistics
	4 1 T T 1 A 4 1	2006 2016	with Applications.
	Arak Uni. & Arak	2006-2016	
	Payam Noor Uni.		2. Mood et al., Introduction to
			the Theory of Statistics.
Applied Regression Analysis	Qatar Uni.	2023-2024	I. Montgomery, Peck &
	Arak Azad Uni.	2008-2011	Vining; Introduction to
			Linear Regression
			Analysis, Wiley, 2012.
			2. Draper & Smith, Applied
			Regression Analysis.
Categorical Data Analysis	Qatar Uni.	2022	Alan Agresti, An Introduction to
			Categorical Data Analysis, 2nd

			edition, 2006, Wiley.
Statistics I	Qatar Uni.	Since 2020	Mendenhall, Beaver and Beaver
			(2014) Introduction to
			Probability and Statistics.
Statistical Marketing Research	The Australian	2004	ANU Lecture Notes
Methods (STAT2003)	National Uni.		
Introduction to Probability	Arak Uni.	2006-2017	Ross, A First Course In
			Probability.
Multivariate Analysis	Arak Azad Uni.	2008-2011	Anderson, An Introduction to
			Multivariate Statistical Analysis
Probability and Statistics for	Sistan & Balochistan	1993-2010	Mendenhall, Statistics for
Engineers	Uni. and Arak Univ.		Engineering and the Sciences
Biological Statistics I & II	Arak Uni.	2006-2007	Wayne & Chad, Biostatistics: A
_			Foundation For Analysis In The
			Health Sciences
Calculus and Analytic	Sistan & Balochistan	1993-2010	Silverman, Modern Calculus and
Geometry	Uni. and Arak Uni.		Analytic Geometry.

#### 2. Graduate

Course Title	Institution	Year	Text Book
Mathematical Statistics	Qatar Uni.	2020, 2022,	Casella & Berger, <i>Statistical Inference.</i>
		2024	_
	Arak Medical Uni. &	2013-2015	
	Arak Azad Uni.		
Linear Models	Qatar Uni.	2021, 2024	Seber & Lee, Linear Regression Analysis
	Arak Azad Uni.	2012-2014	
			Rencher & Schaalje, <i>Linear Models in</i>
			Statistics
Advanced Simulation	Arak Uni. & Arak	2013-2018	Robert & Casella, Introducing Monte
	Medical Uni.		Carlo Methods with R.
Survival Analysis	Arak Medical Uni.	2013-2015	Miller, Survival Analysis.
Combinatorial	Arak Uni.	2014-2018	Zaldivar et al, Advances in Metaheuristics
Optimization			Algorithms: Methods and Applications.

# MASTER STUDENT SUPERVISION

Year	Student's Name	Thesis Title	Level	Role	Institution
2024	Raghd Badwan	Competing Risk Models in Presence of Progressively Type-	MSc.	Supervisor	Qatar Univ.

		II censored data for Dagum			
		Distribution			
2022	Hadeel	Reliability analysis of Stress-	MSc.	Supervisor	Oatar Univ.
	Makableh	Strength model from truncated		1	
		Pareto distribution based on			
		progressively type II censored			
		samples			
2020	Samah	Goodness of fit testing for the	MSc	Co-	Oatar Univ
2020	Ibrahim	log-logistic distribution based	wibe.	Supervisor	Quitar Oniv.
	Ioramin	on Type I censored data		Supervisor	
2020	Salman Umar	Exponential model for breast	MSo	Co	Octor Univ
2020	Saiman Unier	exponential model for breast	MISC.	CO-	Qatai Univ.
		data via multipla imputation		Supervisor	
2010	7 Isfari	Augligation of Optimization	MC	Com o mais o m	A note I Iniza
2019	Z. Jalari	Application of Optimization	MSC.	Supervisor	Arak Univ.
		Methods in Solving Tray			
2010	N. A.1. 1'	Problem		G .	A 1 TT '
2019	M. Abdi	On the solutions of the N-	MSc.	Supervisor	Arak Univ.
2010		queens problem		. ·	. 1 TT ·
2019	X 7 4 1 11	Newsvendor problem with end-	MSc.	Supervisor	Arak Univ.
	V. Ahmadlo	of-period demand and clearance			
		price decision variables		~ .	
2018	H. Rabiei	The Late Acceptance Hill	MSc.	Supervisor	Arak Univ.
		Climbing Metaheuristic			
		Algorithm			
2018	Z. Kadivar	Stein lemma for the multivariate	MSc.	Supervisor	Arak Univ.
		generalized hyperbolic			
		distribution and its application			
		in portfolio optimization			
2018	S. Mirzakhani	Optimization of stock levels in	MSc.	Supervisor	Arak Univ.
		rental systems			
2018	F. Jahanara	Optimizing Preventive	MSc.	Supervisor	Arak Univ.
		Maintenance Using Bayesian			
		Failure Rate Modeling			
2018	M. Shiri	An Improvement of the Genetic	MSc.	Supervisor	Arak Univ.
		Algorithm for Solving			
		Traveling Salesman Problem			
2017	F.	Optimal control of inventory	MSc.	Supervisor	Arak Univ.
	Basirahmadlou	under random replenishment			
2017	M. Mozaffari	Price control model revenue	MSc.	Supervisor	Arak Univ.
		management using minimax			
		regret under limited information			
		of demand			
2017	A. Rezaei	On the corridor allocation	MSc.	Supervisor	Arak Univ.
		problem using simulated			
		annealing and tabu search			
		methods			
2017	E. Khosravi	Finding all Nash equilibriums	MSc.	Advisor	Arak Univ.
2017	A. Deris	Nash equilibriums in network	MSc.	Advisor	Arak Univ.
		creation game			
2016	А.	Optimization of the newsvendor	MSc.	Supervisor	Arak Univ.

	Varmaziyari	problem based on confidence			
		intervals under random demand			
2016	A. Radman	The solution of the linear	MSc.	Supervisor	Arak Univ.
		assignment problem using ant			
		colony optimization algorithm			
2016	F. Shirin	Optimization of the newsvendor	MSc.	Supervisor	Arak Univ.
		problem with partial			
		information on demand based			
		on minimax regret			
2015	S. Abolhasani	Goodness of fit tests for interval	MSc.	Supervisor	Arak. Med.
		censored data and it's			Univ.
		applications in medical data			
2015	D. Habibi	Estimating the survival function	MSc.	Supervisor	Arak. Med.
		under interval censored data and		_	Univ.
		it's applications in medical data			

## 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.