

CURRICULUM VITAE

Reza Pakyari

Associate Professor of Statistics

ADDRESS

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EDUCATION

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|------|---|------------|------------------------------------|-----------|
| 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 |
| | <i>Thesis Title:</i> A survey on Weibull Distribution | | | |
| | <i>Supervisor:</i> Prof. Javad Behboodian | | | |
| 1990 | B.S. | Statistics | Shahid Chamran Ahwaz University | Iran |

EXPERIENCE

2019-Present	Associate Professor	Department of Mathematics, Statistics and Physics	Qatar University	Qatar
2016-2019	Associate Professor	Department of Mathematics	Arak University	Iran
2006-2016	Assistant Professor	Department of Mathematics	Arak University	Iran
1996-2002	Lecturer	Department of Mathematics	Arak University	Iran
1993-1996	Lecturer	Department of Mathematics	Sistan and Baloochistan University	Iran

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.

VISITING POSITION HELD

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

PUBLICATIONS

Pakyari, R (2021). Goodness-of-fit Testing Based on Gini Index of Spacings for Progressive Type-II Censored Data. *Communications in Statistics-Simulation and Computation*. doi.org/10.1080/03610918.2021.1930052

Pakyari, R (2021). Inference on $P[Y < X]$ for Geometric Extreme Exponential Distribution. *Mathematics and Statistics*, **9(4)**, 527-534.

Pakyari, R and Baklizi, A. (2021). On Goodness-of-Fit Testing for Burr Type X Distribution under Progressively Type-II Censoring. *Under Review*.

Baklizi, A. and Pakyari, R (2021). Testing Goodness of Fit of Completely Specified Distributions and Distributions with Estimated Parameters Using Progressively Type-II Censored Data. *Under Review*.

Pakyari, R (2020). Validity of Biomedical Model Fitting under Progressively Type-II Censored Data. *EurAsian Journal of BioSciences*, **14(2)**, 7365-7369.

Pakyari, R (2020). Testing Exponentiality in Reliability Engineering Based on k -step Spacings for Progressively Type-II Censored Data. *International Journal of Advanced Research in Engineering and Technology*, **11(12)**, 2291-2298.

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**, 2998-3009.

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.

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.

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.

Pakyari, R. and Balakrishnan, N. (2013b). Testing Exponentiality Based on Type-I Censored Data. *Journal of Statistical Computation and Simulation*, **83**, 2369-2378.

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**, 167-178.

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.

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.

Pakyari, R. (2010). Discriminating between generalized exponential, geometric extreme exponential and Weibull distributions. *Journal of Statistical Computation and Simulation*, **80**, 1403-1412.

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.

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.

CONFERENCE PRESENTATIONS

Pakyari, R. (2018), Testing Goodness-of-Fit based on Type-I censored data, *14th 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*. (ww2.araku.ac.ir/~r_pakyari/S_PLUS.pdf)

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

RESEARCH GRANTS

Investigators	Topic	Source	Year
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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	<i>Lee & Wang, Statistical Methods for Survival Data Analysis</i>
	Arak Azad Uni.	2008-2011	
Statistical Simulation	Qatar Uni.	2019-2020	Ross, Simulation
Sampling Methods	Qatar Uni.	2021	Scheaffer, Mendenhall, Ott, Gerow, Survey Sampling

Nonparametric Statistics	Qatar Uni.	2020	Higgins, <i>Introduction to Modern Nonparametric Statistics</i>
	Arak Payam Noor Uni.	2006-2008	
Mathematical Statistics I & II	Arak Uni. & Arak Payam Noor Uni.	2006-2016	1. Mood et al., <i>Introduction to the Theory of Statistics</i> . 2. Ferund, <i>Mathematical Statistics with Applications</i> .
Introduction to Probability	Arak Uni.	2006-2017	Ross, <i>A First Course In Probability</i> .
Multivariate Analysis	Arak Azad Uni.	2008-2011	Anderson, <i>An Introduction to Multivariate Statistical Analysis</i>
Applied Regression Analysis	Arak Azad Uni.	2008-2011	Draper & Smith, <i>Applied Regression Analysis</i> .
Statistical Marketing Research Methods (STAT2003)	The Australian National Uni.	2004	<i>ANU Lecture Notes</i>
Probability and Statistics for Engineers	Sistan & Balochistan Uni. and Arak Univ.	1993-2010	Mendenhall, <i>Statistics for Engineering and the Sciences</i>
Biological Statistics I & II	Arak Uni.	2006-2007	Wayne & Chad, <i>Biostatistics: A Foundation For Analysis In The Health Sciences</i>
Calculus and Analytic Geometry	Sistan & Balochistan Uni. and Arak Uni.	1993-2010	Silverman, <i>Modern Calculus and Analytic Geometry</i> .

2. Graduate

Course Title	Institution	Year	Text Book
Mathematical Statistics	Qatar Uni.	2020	Casella & Berger, <i>Statistical Inference</i> .
	Arak Medical Uni. & Arak Azad Uni.	2013-2015	
Linear Models	Qatar Uni.	2021	Seber & Lee, <i>Linear Regression Analysis</i> Rencher & Schaalje, <i>Linear Models in Statistics</i>
	Arak Azad Uni.	2012-2014	
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
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2020	Samah Ibrahim	Goodness of fit testing for the log-logistic distribution based on Type I censored data	M.S.	Co- Supervisor	Qatar Univ.
2020	Salman Umer	Exponential model for breast cancer partly interval censored data via multiple imputation	M.S.	Co- Supervisor	Qatar Univ.
2019	Z. Jafari	Application of Optimization Methods in Solving Tray Problem	M.S.	Supervisor	Arak Univ.
2019	M. Abdi	On the solutions of the N-queens problem	M.S.	Supervisor	Arak Univ.
2019	V. Ahmadlo	Newsvendor problem with end-of-period demand and clearance price decision variables	M.S.	Supervisor	Arak Univ.
2018	H. Rabiei	The Late Acceptance Hill Climbing Metaheuristic Algorithm	M.S.	Supervisor	Arak Univ.
2018	Z. Kadivar	Stein lemma for the multivariate generalized hyperbolic distribution and its application in portfolio optimization	M.S.	Supervisor	Arak Univ.
2018	S. Mirzakhani	Optimization of stock levels in rental systems	M.S.	Supervisor	Arak Univ.
2018	F. Jahanara	Optimizing Preventive Maintenance Using Bayesian Failure Rate Modeling	M.S.	Supervisor	Arak Univ.
2018	M. Shiri	An Improvement of the Genetic Algorithm for Solving Traveling Salesman Problem	M.S.	Supervisor	Arak Univ.
2017	F. Basirahmadlou	Optimal control of inventory under random replenishment	M.S.	Supervisor	Arak Univ.
2017	M. Mozaffari	Price control model revenue management using minimax regret under limited information of demand	M.S.	Supervisor	Arak Univ.
2017	A. Rezaei	On the corridor allocation problem using simulated annealing and tabu search methods	M.S.	Supervisor	Arak Univ.
2017	E. Khosravi	Finding all Nash equilibriums	M.S.	Advisor	Arak Univ.
2017	A. Deris	Nash equilibriums in network creation game	M.S.	Advisor	Arak Univ.
2016	A. Varmaziyari	Optimization of the	M.S.	Supervisor	Arak Univ.

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

SERVICE

I have reviewed papers for:

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*.

Journal of Advanced Mathematical Modeling (JAMM), Shahid Chamran University of Ahwaz.

PROFESSIONAL APPOINTMENT

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

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

COMPUTER SKILLS

Statistical Software: R, SPSS, Minitab.

Other software: LaTeX, Microsoft Office.