

# Mohammad Arashi

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Date of Birth: 14 May 1981, Married

## Education

Ph.D. (Statistics), Ferdowsi University of Mashhad, Iran, 2008  
M.Sc. (Mathematical Statistics), Ferdowsi University of Mashhad, Iran, 2005  
B.Sc. (Statistics), Shahid Bahonar University of Kerman, Iran, 2003

## Scientific Position

Extraordinary Professor, University of Pretoria, 2014-present.  
Associate Professor, Shahrood University of Technology, 2012 – present.  
Postdoctoral Fellow, University of Pretoria, 2012-2013.  
Assistant Professor, Shahrood University of Technology, 2008 – 2012.

## Academic Position

Member of Scientific Commission in Mathematical Sciences and Physics, Shahrood University of Technology, (2019-)  
Member of Professional Educational Affairs, School of Mathematical Sciences, Shahrood University of Technology (2014-2016)  
Head of Department of Applied Mathematics (including Statistics branch), Shahrood University of Technology, (2011- 2013)

## Fields of Research

Machine Learning, High-dimensional Analysis, Longitudinal Data Analysis.

## Honors and Awards

1. ISI Elected Member, 2019.
2. NRF rated researcher C2, South Africa, 2017.
3. Winner of Prof Bozorgnia Award, Iranian Statistical Institute, Iran, 2016.
4. Winner of Prof Behboodian Award, Iranian Statistical Institute, Iran, 2016.
5. Award for Research Excellence, Shahrood University of Technology, 2015.
6. Award for Research Excellence, Shahrood University of Technology, 2014.
7. Appointed as an Extraordinary Professor, Department of Statistics, University of Pretoria, South Africa, 2014
8. Award for Teaching Excellence, Shahrood University of Technology, 2013.
9. Winner of Prof Behboodian Award and selected as the best Iranian young researcher in Statistics, Iranian Statistical Institute, Iran, 2012.
10. Award for Teaching Excellence, Shahrood University of Technology, 2012.
11. Award for Teaching Excellence, Shahrood University of Technology, 2010.
12. Award for Research Excellence, Shahrood University of Technology, 2010.
13. Winner of International Statistical Institute (ISI) Jan Tinbergen Young Researcher Award, 2009.

## Professional Services

- Member of the Scientific Committee, 15<sup>th</sup> Iranian Statistics Conference, Yazd University, Iran, August 2020.
- Member of the Scientific Committee, 1<sup>st</sup> National Conference on Mathematical Modeling and Computational Methods in Sciences and Engineering, University of Eyvanekey, Iran, February 2020.
- Member of Editorial Board, Journal of Computational Statistics and Modeling, 2019-present
- Member of the Scientific Committee, 1<sup>st</sup> Seminar on Evidential Inference, Ferdowsi University of Mashhad, Iran, 12 June 2019.
- Member of the directors' board of Iranian Statistical Society, September 2018-present.
- Committee member of International Symposium on Big Data and Applied Statistics (ISBDAS), Guangzhou, China, November 2018.
- Chairman of the Scientific Committee, 14<sup>th</sup> Iranian Statistics Conference, Shahrood University of Technology, Iran, August 2018.
- Member of the Scientific Committee, 2<sup>nd</sup> Seminar on Spatial Statistics and Its Applications, Shahrood University of Technology, Iran, October 2017
- Guest Editor, Special Issue on "Computational Techniques in Theoretical and Applied Statistics" of the journal "Statistics, Optimization & Information Computing" (SOIC), 2017
- Associate Editor, Journal of Iranian Statistical Society (JIRSS), 2016-present

# Teaching Experiences

Post Graduate Course	Undergraduate Course	
Statistical Inference 1 & 2	Design of Experiments	Times Series
Multivariate Analysis	Engineering Statistics	Multivariate Analysis
Advanced Topics in Nonparametric	Accounting Statistics	Statistical Methods
Advanced Statistical Inference	Engineering Mathematics	Official Statistics
Statistical Analysis for Management	Calculus I & II	Mathematical Statistics
Advanced Topics in Applied Statistics	Linear Algebra	Regression
	Continues Multivariate Methods	Nonparametrics
	Discrete Multivariate Methods	

## Professional Affiliations

Bernoulli Society (BS), Institute of Mathematical Statistics (IMS), International Statistical Institute (ISI), Iranian Mathematical Society (IMS), Iranian Statistical Society (ISC), South African Statistical Association (SASA)

## PhD Supervision

1. Makgai, S. L. From Beta to Dirichlet Frontiers, University of Pretoria, 2017-2020. (*Co-Supervision*)
2. Lotfi, R. Imroving Data Classification by Using Shrinkage Estimators, Shahrood University of Technology, 2019-present. (*Co-Supervision*)
3. Kashani, M. Improved Estimators in Fuzzy Regression Models, Shahrood University of Technology, 2018-present.
4. Taavoni, M. Estimation for Semiparametric Modeling in Longitudinal Data Analysis, Shahrood University of Technology, 2018-present.
5. Safariyan, A. Improved Estimators of Some Reliability Characteristics, Shahrood University of Technology, 2017-2019.
6. Kazemi, M. Variable Selection and Structure Identification for Semiparametric Models, Shahrood University of Technology, 2017-2019. (*Co-Supervision*)
7. Millard, S. Contributions to mixture regression modelling with applications in industry, University of Pretoria, 2015-2019. (*Co-Supervision*)
8. Mahmoodi, M. Improved Estimators for Kernel Probability Estimation under Dependence, Shahrood University of Technology, 2015-present. (*Co-Supervision*)
9. van Niekerk, J. Developments in Wishart Ensembles and Bayesian Application, University of Pretoria, 2015-2017. (*Co-Supervision*)
10. Karbalaei, M.H. Performance Analysis of Preliminary Test Estimator and Conflicting Test Statistics, Ferdowsi University of Mashhad, 2013-2018. (*Co-Supervision*)
11. Fallah, R. Some Contributions to Shrinkage Estimation in Multiple Regression Model, Ferdowsi University of Mashhad, 2013-2017. (*Co-Supervision*)
12. Norouzirad, M. Improved Estimation Strategies in Some Penalized Regression Models, University of Shahrood, 2013-2018.
13. Coetsee, J. The Performance of the Preliminary Test Estimator under Different Loss Functions, University of Pretoria, 2012-2014.
14. Arabi, R. Improved Estimation Based on Record Values, Ferdowsi University of Mashhad, 2010-2014. (*Co-Supervision*)

15. Iranmanesh, Anis On Elliptically Contoured Distribution and Multivariate Student-t Distribution, Ferdowsi University of Mashhad, 2009-2012. (*Co-Supervision*)
16. Roozbeh, M. Estimation in Partial Linear Models, Ferdowsi University of Mashhad, 2007-2011. (*Co-Supervision*)

## MSc Supervision

1. Sibanda, Z. Shrinkage Estimation in ARMA-GARCH Regression Models with an Application in Bitcoin Returns, University of Pretoria, 2018-present. (*Co-Supervision*)
2. Shirzayee, S. On Variable Selection Methods in Regression Models with Time Series Errors, Shahrood University of Technology, 2018-۱۴۱۹.
3. Mirsalary, F. On Variable Selection Methods in High Dimensional Regression Models, Shahrood University of Technology, 2018-2019.
4. Goodarzi Vanani, V. A Robust Version of Bridge Regression, Shahrood University of Technology, 2017 – 2018.
5. Rajabloo, S. High Dimensional Penalized Regression with Differentiable LASSO, Shahrood University of Technology, 2017-2018.
6. Rahmati, S. A. A. Bayesian Penalized Regression, Shahrood University of Technology, 2017-2018.
7. Faramarzi, Z. Statistical Conjoint Analysis, Shahrood University of Technology, 2017-2018.
8. Rahmani, M. Likelihood-based Inference in Ridge Regression for Longitudinal Data, Shahrood University of Technology, 2016-2018.
9. Hosseinpour, Z. Shrinkage covariance matrix estimator in high dimensional setting, Shahrood University of Technology, 2016-2018.
10. Nagar, P. Contributions to  $\kappa - \mu$  Models in Wireless Systems, University of Pretoria, 2016-2017 (*Co-Supervision*)
11. Golpaygani, M. Penalized Cox Proportional Hazards Regression, Shahrood University of Technology, 2016-2017.
12. Salajegheh, A. Ridge Structural Equation Model, Shahrood University of Technology, 2016-2017.
13. Arast, M. Comparing the Performance of Some Bridge Estimators in Multiple Regression Model, Shahrood University of Technology, 2015-2017.
14. Ebadi, F. Application of kernel estimation with variable band width in cell up scaling of oil reservoirs, Shahrood University of Technology, 2015-2017.
15. Farokhi, M. Study on some ridge regression methods in fuzzy environment, Shahrood University of Technology, 2016-2017 (*Co-Supervision*)
16. Ras, J. Christiaan, The Risk Performance of Preliminary Test Estimators in a Heteroscedastic Linear Regression Model Under Different Loss Functions, University of Pretoria, 2014-2015 (*Co-Supervision*)
17. Mirzaie, M. Studying Some Bandwidth Methods in Kernel Estimation for Astrostatistics Data, Shahrood University of Technology, 2014-216.
18. Ferreira, J. The Correlated Bivariate Noncentral F Distribution: Extensions to Product and Ratio Components, University of Pretoria, 2013-2014. (*Co-Supervision*)
19. Cronje, T. A Mixed Model Approach to Conjoint Analysis, University of Pretoria, 2013-2014. (*Co-Supervision*)
20. Nakale, S. N. The Performance of Serial Correlation Preliminary Test Estimators under Different Loss Function, University of Pretoria, 2013. (*Co-Supervision*)
21. Ashoori, E. Shrinkage Estimator for the High-dimensional Multivariate Normal Covariance Matrix, Shahrood University, 2013-2014.
22. Barabadi, P. Shrinkage Estimation in K-means Cluster Analysis for Multivariate Normal Distribution, Shahrood University, 2013-2014.
23. Yaghoobi Jasemi, A., Multivariate Analysis of Variance Using a Kotz-type Distribution, Shahrood University, 2013-2014.
24. Hoseini, S. B., Bayesian Multidimensional Scaling in Multivariate Normal Distribution, Shahrood University, 2013-2015.

25. Borzoei Bidgoli, M., On the Performance of Jackknifed Ridge Estimator, Shahrood University, 2013-2014.
26. Hossienkhani, H., On Information Theory Based on Record Observations, Shahrood University, 2012-2013.
27. Karamikabir, H., Shrinkage Estimation in Restricted Models, Shahrood University, 2012-2013.
28. Mirabi, K., Comparing the Performance of Sensitivity Estimators of Scale Parameter, Shahrood University, 2012-2013.
29. Tourezadeh, S. Bayesian Wavelet Shrinkage Estimation under the Linex Loss, Shahrood University, 2012-2013.
30. van Niekerk, J. Subjective Bayesian Analysis of Elliptical Models, University of Pretoria, 2011-2012. (*Co-Supervision*)
31. Valizadeh, T. Adaptive and Non-Adaptive Splines in Semiparametric Regression Models, Shahrood University, 2011-2012.
32. Moosavi, V. Topics in Scale Mixture of Skew Normal Distributions, Shahrood University, 2011-2012.
33. Tajadod, A. Shrinkage Estimation in Multivariate Models, Shahrood University, 2011-2012.
34. Pourhosseini, M., Constrained Bayes Estimators under Balanced Loss Function, Shahrood University, 2010-2011.
35. Najarian, S., Studying the Performance of the Ridge Regression Estimators in Singular Linear Models, Shahrood University, 2010-2011.
36. Farshidian Far, Z., Complex Matrix Variate Beta Distribution, Islamic Azad University, Mashhad Branch, 2010-2011.
37. Norouzirad, M. A Note on Loss Estimation, Islamic Azad University, Mashhad Branch, 2010-2011.
38. Jafari, Z., Stein-type Estimation of the Mean, Islamic Azad University, Mashhad Branch, 2009-2010.
39. Soleimani, H., Study the Performance of Improved Estimators in Two Sample Models, Ferdowsi University of Mashhad, 2009-2010.
40. Hassanzadeh Bashtian, M., Shrinkage Estimators in Ridge Regression Model With Elliptically Distributed Errors, Ferdowsi University of Mashhad, 2008-2009.

## Books

1. Arashi, M., Sadeghi, H., and Tabatabaei, S. M. M. (2019) Statistical Inference: Point Estimation Approach, Shahrood University of Technology Press, IRAN (in Persian).
2. Saleh, A. K. Md. Ehsanes, Arashi, M., and Kibria, B. M. Golam (2019) *Theory of Ridge Regression Estimation with Applications*, John Wiley, USA.
3. Saleh, A. K. Md. Ehsanes, Arashi, M. and Tabatabaei, S. M. M. (2014) *Statistical Inference for Models with Multivariate t-Distributed Errors*, John Wiley, New Jersey.

## Chapters

1. Arashi M., Valizadeh T. (2020) Misspecified Restriction in Partial Linear Models. In: Xu J., Ahmed S., Cooke F., Duca G. (eds) Proceedings of the Thirteenth International Conference on Management Science and Engineering Management. ICMSEM2019 2019. Advances in Intelligent Systems and Computing, vol 1001. Springer, Cham, Switzerland.
2. Yuzbasi, B., Ahmed, S. Ejaz, Arashi, M., and Norouzirad, M. (2020) LAD, LASSO and Related Strategies in Regression Models, In: Xu J., Ahmed S., Cooke F., Duca G. (eds) Proceedings of the Thirteenth International Conference on Management Science and Engineering Management. ICMSEM2019 2019. Advances in Intelligent Systems and Computing, vol 1001. Springer, Cham, Switzerland.
3. Safariyan, A., Arashi, M., Ahmed, S. Ejaz., and Arabi Belaghi, R. (2019) Reliability Analysis Using Ranked Set Sampling, In: Xu J., Ahmed S., Cooke F., Gen, M., and Ahmed, S. Ejaz. (eds) Proceedings of the Twelfth International Conference on Management Science and Engineering Management.

## Journal Papers

1. Arashi, M. and Nadarajah, S. (2019) A paradoxical argument about domination, *Journal of Computational and Applied Mathematics*, Accepted.
2. Bekker, A., Nagar, P., Arashi, M., and Rautenbach, H. (2019) From symmetry to asymmetry on the disc manifold: Modelling of Marion Island data, *Symmetry*, Accepted.
3. Yuzbasi, B., Arashi, M., and Ahmed, S. Ejaz (2019) Shrinkage estimation strategies in generalized ridge regression models under low/high-dimension regime, *International Statistical Review*, Accepted.
4. Taavoni, M. and Arashi, M. (2019) Kernel estimation in semiparametric mixed effect longitudinal modeling, *Statistical Papers*, Accepted.
5. Kazemi, M., Shahsavani, D., Arashi, M., and Rodrigues, P. C. (2019) Estimation in partial linear model with spline modal function, *Communications in Statistics-Simulation and Computation*, Accepted.
6. van Niekerk, J., Bekker, A., and Arashi, M. (2019) Beta regression in the presence of outliers - a wieldy Bayesian solution, *Statistical Methods in Medical Research*, 28(12), 3729-3740.
7. Norouzirad, M. and Arashi, M. (2019) Preliminary test and Stein-type shrinkage ridge estimators in robust regression, *Statistical Papers*, 60(6), 1849-1882.
8. Rabiei, M. R., Arashi, M., and Farrokhi, M. (2019) Fuzzy ridge regression with fuzzy input and output, *Soft Computing*, 23, 12189-12198.
9. Safariyan, A., Arashi, M. and Arabi Belaghi, R. (2019) Improved estimators for stress-strength reliability using record ranked set sampling scheme, *Communication in Statistics – Simulation and Computation*, 48(9), 2708-2726.
10. Sunicher, R. Y., Mamode Khan, N., Jowaheer, V., Bourguignon, M., and Arashi, M. (2019) A Primer on a Flexible Bivariate Time Series Model for Analyzing First and Second Half Football Goal Scores: The Case of the Big 3 London Rivals in the EPL, *Annals of Data Sciences*, 6(3), 531-548.
11. Azad, M. R., Kamkar Rouhani, A., Tokhmechi, B., Arashi, M., and Baratnezhad, E., (2019) Simultaneous upscaling of two properties of reservoirs in one dimension using adaptive bandwidth in kernel function method, *Petroleum Exploration and Development*, 46(4), 746-752.
12. Karbalaei, M. H., Tabatabaei, S. M. M. and Arashi, M. (2019) On the Preliminary Test Generalized Liu Estimator with Series of Stochastic Restrictions, *Journal of Iranian Statistical Society (JIRSS)*, 18(1), 113-131.
13. Arashi, M. and Roozbeh, M. (2019) Some improved estimation strategies in high-dimensional semiparametric regression models with application to the Riboflavin production data, *Statistical Papers*, 60(3), 317-336.
14. Bekker, A., Arashi, M. and Ferreira, J. T. (2019) New bivariate gamma types with MIMO application, *Communication in Statistics – Theory and Methods*, 48(3), 596-615.
15. Yuzbasi, B. and Arashi, M. (2019) Double shrunken selection operator, *Communications in Statistics - Simulation and Computation*, 48(3), 666-674.
16. Sunicher, R. Y., Mamode Khan, N., Koodoruth, I., Jannoo, Z., Rampat, S., Jowaheer, V., and Arashi, M. (2019) Larceny Trend in some Areas of Mauritius via a Bivariate INAR(1) Model with Dispersed

COM-Poisson Innovations, *Communication in Statistics – Case Studies, Data Analysis and Applications*, 4(2), 69-81.

17. Kazemi, M., Shahsavani, D., and Arashi, M. (2019) A sure independence screening procedure for ultra-high dimensional partially linear additive models, *Journal of Applied Statistics*, 46(8), 1385-1403.
18. Safaryian, A., Arashi, M., and Arabi Belaghi, R. (2019) Improved Point and Interval Estimation of the Stress-Strength Reliability Based on Ranked Set Sampling, *Statistics*, 53, 101-125.
19. Arashi, M., Bekker, A., and van Niekerk, J. (2019) Weighted Distributions of Eigenvalues, *Linear Algebra and Its Applications*, 561, 24-40.
20. Karamikabir, H., Afshari, M., and Arashi, M. (2018) Shrinkage estimation of non-negative mean vector with unknown covariance under balance loss, *Journal of Inequalities and Applications*, Accepted.
21. Bekker, A., Ferreira, J. T., Arashi, M., and Rowland, B. W. (2018) Computational methods applied to a skewed generalised normal family, *Communications in Statistics - Simulation and Computation*, Accepted.
22. Rahmani, M., Arashi, M., Mamode Khan, N., and Sunecher, Y. (2018) Improved mixed model for longitudinal data analysis using shrinkage method, *Mathematical Sciences*, 12(4), 305-312.
23. Kleyn, J., Arashi, M., and Millard, S. (2018) Preliminary Test Estimation in System Regression Models in View of Asymmetry, *Computational Statistics*, 33, 1897-1921.
24. Kazemi, M., Shahsavani, D. and Arashi, M. (2018) Variable selection and structure identification for ultrahigh-dimensional partially linear additive models with application to cardiomyopathy microarray data, *Statistics, Optimization and Information Computing*, 6, 373-382.
25. Arashi, M., Norouzirad, M., Ahmed, S. Ejaz and Yuzbasi, B. (2018) Rank-based Liu regression, *Computational Statistics*, 33(3), 1525-1561.
26. Wu, J., Asar, Y. and Arashi, M. (2018) On the restricted almost unbiased Liu estimator in the Logistic regression model, *Communication in Statistics – Theory and Methods*, 47(18), 4389-4401.
27. Norouzirad, M. and Arashi, M. (2018) Preliminary test and Stein-type shrinkage LASSO-based estimators, *SORT-Statistics and Operations Research Transactions*, 42(1), 45-58.
28. Fallah, R., Arashi, M. and Tabatabaei, S. M. M. (2018) Shrinkage estimation in restricted elliptical regression model, *Journal of Iranian Statistical Society (JIRSS)*, 17(1), 49-61.
29. Norouzirad, M., Hossain, S. and Arashi, M. (2018) Shrinkage and penalized estimators in weighted least absolute deviations regression models, *Journal of Statistical Computation and Simulation*, 88(8), 1557-1575.
30. Karbalaei, M. H., Arashi, M. and Tabatabaei, S. M. M. (2018) Performance analysis of the preliminary test estimator with series of stochastic restrictions, *Communication in Statistics – Theory and Methods*, 47(1), 1-17.
31. Ferreira, J. T., Bekker, A. and Arashi, M. (2017) Advances in Wishart-type modelling of channel capacity, *REVSTAT-Statistical Journal*, Accepted.
32. Salarzadeh Jenatabadi, H., Moghavvemi, S. Radzi, C. W. J. W. M., Babashamsi, P., and Arashi, M. (2017) Testing students' E-learning via Facebook through Bayesian structural equation modeling, *PLoS One*, 12(9): e1082311.
33. Makgai, S., Bekker, A., Ferreira, J. T. and Arashi, M. (2017) New results from a beta-Pareto class, *South African Statistical Journal*, Accepted.

34. Saleh, A. K. Md. Ehsanes, Arashi, M., Norouzirad, M. and Kibria, B. M. Golam, (2017) On shrinkage and selection: ANOVA model, *Journal of Statistical Research*, 51(2), 165-191.
35. van Niekerk, J., Bekker, A., Arashi, M. (2017) A gamma-mixture class of distributions with Bayesian application, *Communications in Statistics - Simulation and Computation*, 46(10), 8152-8165.
36. Fallah, R., Arashi, M. and Tabatabaei, S. M. M. (2017) On the ridge regression estimator with subspace restriction, *Communication in Statistics – Theory and Methods*, 46(23), 11854-11865.
37. Norouzirad, M., Arashi, M. and Ahmed, S. Ejaz (2017) Improved robust ridge M-estimation, *Journal of Statistical Computation and Simulation*, 87(18), 3469-3490.
38. Asar, Y., Erisoglu, M. and Arashi, M. (2017) Developing a restricted two-parameter Liu-type estimator: A comparison of restricted estimators in the binary logistic regression model, *Communication in Statistics – Theory and Methods*, 46(14), 6864-6873.
39. Arashi, M. and Nadarajah, S. (2017) Generalized elliptical distributions, *Communication in Statistics – Theory and Methods*, 46(13), 6412-6432.
40. Arashi, M., Bekker, A. and van Niekerk, J. (2017) Weighted-type Wishart distributions with application, *REVSTAT-Statistical Journal*, 15(2), 205-222.
41. Roozbeh, M. and Arashi, M. (2017) Least trimmed squares: Asymptotic normality of Feasible estimator in semiparametric regression models, *Journal of Statistical Computation and Simulation*, 87(6), 1130-1147.
42. Bekker, A., van Niekerk, J. and Arashi, M. (2017) Wishart distributions: Advances in theory with Bayesian application, *Journal of Multivariate Analysis*, 155, 272-283.
43. Nagar, Daya, K., Arashi, M. and Nadarajah, S. (2017) Bimatrix variate gamma-beta distributions, *Communication in Statistics – Theory and Methods*, 46(9), 4464-4483.
44. Arashi, M., Kibria, B. M. Golam and Valizadeh, T. (2017) On ridge parameter estimators under stochastic subspace hypothesis, *Journal of Statistical Computation and Simulation*, 87(5), 966-983.
45. Arashi, M., Nadarajah, S. and Akdeniz, F. (2017) The distribution of the Liu type estimator of the biasing parameter in elliptically contoured models, *Communication in Statistics – Theory and Methods*, 46(8), 3829-3837.
46. Ghayour Moradi, Z., Arashi, M., Arslan, O. and Iranmanesh, Anis (2017), A new family of multivariate slash distributions, *Communication in Statistics – Theory and Methods*, 46(7), 3264-3275.
47. Arashi, M. and Nadarajah, S. (2017) On singular elliptical models, *Communication in Statistics – Theory and Methods*, 46(1), 247-258.
48. Kleyn, J., Arashi, M., Bekker, A. and Millard, S. (2017) Preliminary testing of the Cobb-Douglas production function and related inferential issues, *Communications in Statistics - Simulation and Computation*, 46(1), 469-488.
49. Asar, Y., Arashi, M. and Wu, J. (2016) Restricted ridge estimator in the logistic regression model, *Communications in Statistics - Simulation and Computation*, Accepted.
50. Ferreira, J. T., Bekker, A. and Arashi, M. (2016) Objective Bayesian estimators for the right-censored Rayleigh distribution: evaluating the Al-Bayyati loss function, *REVSTAT-Statistical Journal*, 14(4), 433-454.
51. Roozbeh, M. and Arashi, M. (2016) New ridge regression estimator in semiparametric regression models, *Communications in Statistics - Simulation and Computation*, 45, 3683-3715.

52. Roozbeh, M. and Arashi, M. (2016) Shrinkage ridge regression in partial linear models, *Communications in Statistics - Simulation and Computation*, 45(20), 6022-6044.
53. Roozbeh, M., Babaie-Kafaki, S. and Arashi, M. (2016) A class of biased estimators based on QR decomposition, *Linear Algebra and Its Applications*, 508, 190-205.
54. van Niekerk, J., Bekker, A., Arashi, M. and De Waal, D. J. (2016) Estimation under the matrix variate elliptical model, *South African Statistical Journal*, 50, 149-171.
55. Ferreira, J. T., Bekker, A. and Arashi, M. (2016) Bivariate noncentral distributions: An approach via the compounding method, *South African Statistical Journal*, 50, 103-122.
56. Roozbeh, M., Arashi, M. and Kibria, B. M. Golam. (2015) Generalized ridge regression estimator in semiparametric regression models, *Journal of Iranian Statistical Society (JIRSS)*, 14(1), 25-62.
57. van Niekerk, J., Bekker, A., Arashi, M. and Roux, J. J. J. (2015) Subjective Bayesian analysis of elliptical models, *Communication in Statistics – Theory and Methods*, 44(17), 3738-3753.
58. Arashi, M., Janfada, M. and Norouzirad, M. (2015), Singular ridge regression with stochastic constraints, *Communication in Statistics – Theory and Methods*, 44, 1281-1292.
59. Rounaghi, M. M., Abbaszadeh, M. R. and Arashi, M. (2015) Stock price forecasting for companies listed on Tehran stock exchange using multivariate adaptive regression splines model and semi-parametric splines technique, *Physica A: Statistical Mechanics and its Applications*, 438, 625-633.
60. Arashi, M., Saleh, A. K. Md. Ehsanes, Nagar, Daya K. and Tabatabaey, S. M. M. (2015), Bayesian statistical inference for Laplacian class of matrix variate elliptically contoured models, *Communication in Statistics – Theory and Methods*, 44(13), 2774-2787.
61. Arashi, M. and Roozbeh, M. (2015) Shrinkage estimation in system regression model, *Computational Statistics*, 30, 359-376.
62. Arabi Belaghi, R., Arashi, M. and Tabatabaey, S. M. M. (2015) Improved estimators of the distribution function based on lower record values, *Statistical Papers*, 65, 453-477.
63. Arashi, M., Bekker, A., Roux, J. J. J. and Loots, M. T. (2015) Integral representation of quaternion elliptical density and its applications, *Communication in Statistics – Theory and Methods*, 44, 778-789.
64. Iranmanesh, Anis, Arashi, M. and Shokri, S. (2015) Generalized matrix T distribution through generalized multivariate gamma distribution, in *Essay on Mathematics and Statistics*, (C. Stoica, Ed.), 113-130, Athens Institute for Education and Research, Greece.
65. Arashi, M. and Valizadeh, T. (2015) Performance of Kibria's methods in partial linear ridge regression model, *Statistical Papers*, 56, 231-246.
66. Arashi, M., Kibria, B. M. Golam and Tajadod, A. (2015) On shrinkage estimators in matrix variate elliptical models, *Metrika*, 78(1), 29-44.
67. Arabi Beldaghi, R., Arashi, M. and Tabatabaey, S. M. M. (2015) On the construction of preliminary test estimator based on record values for the Burr XII model, *Communication in Statistics – Theory and Methods*, 44, 1-23.
68. Akdeniz, F., Akdeniz Duran, E., Roozbeh, M. and Arashi, M. (2015) Efficiency of the Generalized Difference-based Liu Estimators in Semiparametric Regression Models with Correlated Errors, *Journal of Statistical Computation and Simulation*, 85(1), 147-165.
69. Arashi, M., Iranmanesh, Anis, Norouzirad, M. and Salarzadeh Jenatabadi, Hashem (2014) Bayesian analysis in multivariate regression models with conjugate priors, *Statistics*, 48(6), 1324-1334.

70. Arabi Belaghi, R., Arashi, M. and Tabatabaey, S. M. M. (2014) Improved confidence intervals for the scale parameter of Burr XII model based on record values, *Computational Statistics*, 29(5), 1153-1173.
71. Arashi, M., Bekker, A. and Ratnaparkhi, M. (2014) A new definition of form-invariance matrix variate distributions, *South African Statistical Journal*, 48, 205-212.
72. Roozbeh, M. and Arashi, M. (2014) Feasible ridge estimator in seemingly unrelated semiparametric models, *Communication in Statistics - Simulation and Computation*, 43(10), 2593-2613.
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## Presentations

1. Penalized Multivariate t Mixed Model for Multiple Longitudinal Data Analysis, Joint Conference of the Sub-Saharan Network (SUSAN) of the International Biometrics Society (IBS) and DELTAS Africa Sub-Saharan Africa Consortium for Advanced Biostatistics (SSACAB), SAMRC, Cape Town, South Africa, September 2019.
2. Simultaneous Variable Selection and Estimation in Generalized Semiparametric Mixed Effects Modeling of Longitudinal Data, International Symposium on Statistics and Biostatistics, University of Pretoria, South Africa, July 2019, Invited Speaker.
3. Confidence Distribution & BFF, 1<sup>st</sup> Seminar on Evidential Inference, Ferdowsi University of Mashhad, Iran, June 2019, Invited Speaker.
4. Double shrinking and post selection, University of Mazandaran, Iran, April 2019, Invited Talk.
5. The Mobius distribution with spiral motion, 11th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics), Pisa, Italy, December 2018, Invited Speaker (in Organized Invited Session).
6. Post Selection and Double Shrinking: Shrinking to a Greater Extent, 19th International Symposium on Econometrics, Operations Research and Statistics, Antalya, Turkey, October 2018, Keynote Speaker
7. Preliminary Test and Stein-Type Liu Estimators in Partially Linear Models: Sub-Model Analysis, 61<sup>th</sup> World Statistics Congress (ISI-WSC), Marrakech, Morocco, 2017
4. Big Data Analysis Using Shrinkage Strategies, 61<sup>th</sup> World Statistics Congress (ISI-WSC), Marrakech, Morocco, 2017.
5. Inference for Tensor Elliptical Distributions, 4<sup>th</sup> Institute of Mathematical Statistics Asia Pacific Rim Meeting (IMS-APRM), Hong Kong, 2016, Invited Contributed Talk.

6. A note on shrinkage kernel density estimation, International Statistical Institute Regional Statistical Conference (ISI-RSC), Kuala Lumpur, Malaysia, 2014
7. Superiority conditions of shrinkage estimator in Laplacian class of elliptical models, 59<sup>th</sup> Proc. Int. Statist. Inst., CPS, Hong Kong, China, 2013.
8. On singular elliptical distribution, Proc. 8<sup>th</sup> World Cong. Prob. Statist., CS, Istanbul. Turkey, 2012
9. Optimal Stein rule in spherical models, 58<sup>th</sup> Proc. Int. Statist. Inst., CPS, Dublin, Ireland, 2011
10. Constrained Bayes estimator in elliptical models, 57<sup>th</sup> Proc. Int. Statist. Inst., CPM, Durban, South Africa, 2009.
11. Problem of estimation with balanced loss function in elliptical models, 57<sup>th</sup> Proc. Int. Statist. Inst., Durban, South Africa, 2009, Invited Paper Meeting.