

**Allegato alla domanda di partecipazione**  
**Curriculum formativo, didattico, scientifico e professionale del candidato**

**Dichiarazione sostitutiva di certificazioni**

(Art. 46, D.P.R. 28 dicembre 2000 n. 445)

**Dichiarazione sostitutiva dell'atto di notorietà**

(da sottoscrivere davanti all'impiegato addetto o da presentare o spedire con la fotocopia di un documento di identità)

(Art. 47, D.P.R. 28 dicembre 2000 n. 445)

Estremi del bando di selezione	(D.R. n. 452 del 17/03/2023) - Codice Selezione n. 14A_23 AREA 13 - SCIENZE ECONOMICHE E STATISTICHE
Informazioni aggiornate al	22/03/2024
Nome e Cognome	Rahim Mahmoudvand
Data di nascita	11/08/1979

Si raccomanda di indicare con precisione tutti gli elementi valutabili ai sensi del bando di selezione (aggiungere o togliere righe secondo necessità).

**Esperienza professionale**

Periodo	Ente	Principali attività e responsabilità
2014-2024	Bu-Ali Sina University	Teaching and Research
2003-2011	Payame Noor University	Teaching and Research
2016-2024	AGNA (Private Statistical Firm)	Consultant and CEO

**Istruzione, formazione (es. titoli di studio, certificazioni professionali/linguistiche/informatiche)**

Data	Titolo / Principali tematiche	Ente
2008-2012	Ph.D/Statistics	Shahid Beheshti University
2001-2004	MSc/Actuarial Science	Shahid Beheshti University
1997-2001	BSc/Statistics	Ferdowsi University

**Pubblicazioni / Convegni**

<b>Mahmoudvand, R. (2024). Two New Estimators for the Autocorrelation Function Through Singular Spectrum Analysis, Fluctuation and Noise Letters, Accepted.</b>
<b>Mahmoudvand, R., Barati, M. Seif. A, Ranjbaran, S. &amp; Rodrigues, P. C. (2023). Modeling Water Table Depth using Singular Spectrum Analysis. Statistics and Its Interfaces, Vol. 16, pp. 279-286.</b>
<b>Yarmohammadi, M., Afshar, A., Mahmoudvand, R., Nasiri, P. (2022). Predicting intensity function of nonhomogeneous Poisson process. Journal of Statistical Modelling: Theory and Applications, 3(2), 39-50.</b>
<b>Hagbin, H., Najibi, S. M., Mahmoudvand, R., Trinkka, J., &amp; Maadooliat, M. (2021). Functional singular spectrum analysis. Stat, Vol. 10, No. 1, e330.</b>
<b>Jahromi, F. K., Sabziparvar, A. A., &amp; Mahmoudvand, R. (2021). Spectral analysis of soil temperature and their coincidence with air temperature in Iran. Environmental Monitoring and Assessment, Vol. 193, No. 2, pp 1-14.</b>
<b>Mahmoudvand, R., &amp; Rodrigues, P. C. (2021). Prediction intervals for the vector singular spectrum analysis forecasting algorithm in a median-based singular spectrum analysis. Computational AND Mathematical Methods. Vol. 3, No. 1, e1080</b>
<b>Awe, O.O., Rodrigues, P.C. and Mahmoudvand, R. (2020). Non-negative time series reconstruction using singular spectrum analysis: A case study of precipitation dynamics in Nigeria. Fluctuation and Noise Letters. Vol. 19, No. 04, pp 2050045</b>

<b>Rodrigues, P.C., Awe, O.O, Pimentel, J. and Mahmoudvand, R. (2020). Modelling the behaviour of currency exchange rates with singular spectrum analysis and artificial neural networks. Stats Vol. 3, pp. 137–157.</b>
<b>Rodrigues, P.C &amp; Mahmoudvand, R. (2020): A new approach for the vector forecast algorithm in singular spectrum analysis, Communications in Statistics - Simulation and Computation, Vol. 49, No. 3, pp. 591-605.</b>
<b>Mahmoudvand, R., &amp; Rodrigues, P. C. (2020). Predicting the Brexit Outcome Using Singular Spectrum Analysis. Journal of Computational Statistics and Modeling, Vol. 1, No. 1, pp. 11-19.</b>
<b>Papatsouma, I, Mahmoudvand, R., and Farmakis, N. (2019) Evaluating the Goodness of the Sample Coefficient of Variation via Discrete Uniform Distribution. Statistics, Optimization and Information Computing, Vol 7, No. 4, pp. 642-652.</b>
<b>Mahmoudvand, R.; Yarmohammadi, M.; and Rodrigues, P.C. (2019). Forecasting Daily Exchange Rates: A Comparison between SSA and MSSA. RevStat-Statistical Journal, Vol. 17, No. 4, pp. 599-616.</b>
<b>Rodrigues, P.C; Lourenco, V. and Mahmoudvand, R. (2018). A Robust Approach to Singular Spectrum Analysis. Quality and Reliability Engineering International, Vol. 34, pp. 1437-1447.</b>
<b>Arezoomand, F. Yarmohammadi, M, and Mahmoudvand, R. (2018). Asymmetric Uniform-Laplace Distribution: Properties and Applications. Journal of the Iranian Statistical Society, Vol. 17 (2), pp. 119-140.</b>
<b>Rodrigues, P.C; Tuy, Petala, G.S.E. and Mahmoudvand, R. (2018). Randomized singular spectrum analysis for long time series. Journal of Statistical Computation and Simulation, Vol. 88, pp, 1437-1447.</b>
<b>Rodrigues, P.C; and Mahmoudvand, R. (2018). The benefits of multivariate singular spectrum analysis over the univariate version. Journal of the Franklin Institute, Vol. 355, pp 544-564.</b>
<b>Manteqipour, M.; Ghaffari H.A.; Mahmoudvand, R. and Safari A. (2018). Grouping objects to homogeneous classes satisfying requisite mass. Journal of AI and Data Mining, Vol. 6, pp. 163-175.</b>
<b>Mohammadpour, S.; Karzan, S.; and Mahmoudvand, R. (2017). Generalised form of Bonus-Malus System Using Finite Mixture Models. Statistics, Optimization and Information Computing, vol. 5, pp. 179-187.</b>
<b>Mahmoudvand, R.; Konstantinides, G. Dimitrios.; Rodrigues, P.C. (2017). Forecasting Mortality Rate by Multivariate Singular Spectrum Analysis. Applied Stochastic Models in Business and Industry, Vol. 33, No. 6. pp. 717-732.</b>
<b>Mahmoudvand, R.; Rodrigues, P.C (2017). A New Parsimonious Recurrent Forecasting Model in Singular Spectrum Analysis. Journal of Forecasting, Vol. 37, pp. 191-200.</b>
<b>Mahmoudvand, R.; Chong It, T., and Abbasi, N. (2017). Adjusting the Premium Relativities in a Bonus-Malus System: An Integrated Approach Using the First Claim Time and the Number of Claims. Asia-Pacific Journal of Risk and Insurance, Vol. 11, No. 2.</b>
<b>Rodrigues, P.C; Mahmoudvand, R. (2016). Correlation Analysis in Contaminated Data by Singular Spectrum Analysis. Quality and Reliability Engineering International, Vol. 32, pp. 2127-2137.</b>
<b>Ghanati, R; Kazemhafizi, M; Mahmoudvand, R; and Fallahsafari, M. (2016). Filtering and parameter estimation of surface-NMR data using singular spectrum analysis. Journal of Applied Geophysics, Vol. 130, pp. 118-130.</b>
<b>Mahmoudvand, R.; Rodrigues, P.C. (2016). Missing value imputation in time series using Singular Spectrum Analysis. International Journal of Energy and Statistics, Vol 4, No 01, 1650005.</b>
<b>Ghasemi, S.; Mahmoudvand, R.; Yavari, K. (2016). Application of the FMEA in Insurance of High-Risk Industries: A Case Study of Iran's Gas Refineries. Stochastic Environmental</b>

<b>Research and Risk Assessment, Vol. 30, No. 2, pp. 737-745.</b>
<b>Mahmoudvand, R; Faradmali, J; Abbasi, N; and Lurz, K. (2015). A New Modification in the Classical Laplace Distribution. Journal of the Iranian Statistical Society, Vol. 14, No. 2, pp. 93-118.</b>
<b>Mahmoudvand, R.; Alehosseini, F.; Rodrigues, P.C. (2015). Forecasting Mortality Rate by Singular Spectrum Analysis. RevStat-Statistical Journal, Vol. 13, No. 3, pp. 193-206.</b>
<b>Hassani, H.; Mahmoudvand, R.; Nabe Omer, H.; Silvia, E.S. (2014). A Preliminary Investigation into the Effect of Outlier(s) on Singular Spectrum Analysis. Fluctuation and Noise Letter, Vol. 13, No. 4.14500290.</b>
<b>Mahmoudvand, R.; Alhosseini, F.; and Zokaei, M. (2013). Feasibility of Mortality Forecasting with Singular Spectrum Analysis. Journal of Data Science, Vol. 11, No. 4, pp. 851-866.</b>
<b>Hassani, H.; Mahmoudvand, R. (2013) Multivariate Singular Spectrum Analysis: A General view and New Vector Forecasting Approach. International Journal of Energy and Statistics, Vol. 1, No. 1, pp. 55-83.</b>
<b>Mahmoudvand, R.; Edalati, A.; and Shokoohi, F. (2013). Bonus-Malus System in Iran: An Empirical Evaluation. Journal of Data Science, Vol. 11, No. 1, pp. 20-41.</b>
<b>Mahmoudvand, R.; Najari, N.; and Zokaei, M. (2013). On the Parameters for Reconstruction and Forecasting in the Singular Spectrum Analysis. Communication in Statistics: Simulations and Computations, Vol. 42, pp. 860-870.</b>
<b>Hassani, H.; Mahmoudvand, R.; Zokaei, M.; and Ghodsi, M. (2012). On the Separability Between Signal and Noise in Singular Spectrum Analysis. Fluctuation and Noise Letters. Vol. 11, No. 2, pp. 1-11.</b>
<b>Mahmoudvand, R.; and Zokaei, M. (2012). On the Singular Values of the Hankel Matrix with Application in Singular Spectrum Analysis. Chilean Journal of Statistics, Vol. 3, No. 1. pp. 43-56.</b>
<b>Hassani, H.; Mahmoudvand, R.; and Zokaei, M. (2011). Separability and Window Length in Singular Spectrum Analysis. Comptes Rendus Mathematique, Vol. 349, No. 17. pp. 987-991.</b>
<b>Hassani, H; Mahmoudvand, R; Yarmohammadi, M. (2010). Filtering and Denoising in the Linear Regression Models. Fluctuation and Noise Letter. Vol. 9, No. 4, pp. 343-358.</b>
<b>Mahmoudvand, R; Hassani, H; Farzaneh, A; and Howell, G. (2010). The Distribution of a Linear Combination of <math>r</math> Independent Discrete Random Variables. Journal of Interdisciplinary Mathematics. Vol. 13. No. 2. pp 135-142.</b>
<b>Mahmoudvand, R; Hassani, H; Farzaneh, A; and Howell, G. (2010). The Exact Number of Nonnegative Solutions to the Diophantine Inequality. IAENG International Journal of Applied Mathematics, Vol. 40. No. 1, pp. 1-5.</b>
<b>Mahmoudvand, R; and Edalati, A. (2009). On the Distribution of Collective Risk Models. Journal of Statistical Research of Iran. Vol. 6, No. 2. pp. 141-155.</b>
<b>Mahmoudvand, R; and Hassani, H. (2009). Two New Confidence Interval for the Coefficient of Variation in a Normal Distribution. Journal of Applied Statistics. Vol. 36. No. 4. pp. 429-442.</b>
<b>Mahmoudvand, R; and Hassani, H. (2009). Generalized Optimal Bonus-Malus Systems with a Frequency and Severity Component on an Individual Basis in Automobile Insurance. ASTIN Bulletin. Vol. 39, No. 1, pp. 307-315.</b>
<b>Mahmoudvand, R; and Hassani, H. (2005). A New Approximation for the Null Distribution of the Likelihood-Ratio Test Statistics for <math>k</math> Outliers in a Normal Sample. Journal of Statistical Research of Iran. Vol. 2, No. 2. pp. 141-158.</b>
<b>Mahmoudvand, R. Applications of Stochastic Ordering in Insurance: Challenges and Needs. The 3rd Int'l Conference on Statistics, Mathematical Modelling and Analysis, November 6-8, 2020 in Xiamen, China (I attended virtually).</b>

<b>Mahmoudvand, R. Highlighting a Mathematical Property of Sample ACF for Time Series Analysis, yBIS2019, 25-28 Sep 2019, Istanbul, Turkey. Mahmoudvand, R. A Comparison of the Multivariate SSA Methods for Forecasting Mortality Rates, ISBIS2018, 4-6 July 2018, Piraeus, Greece (Invited talk)</b>
<b>Mahmoudvand, R. Determining Retention Limits in Reinsurance Using Bayesian Approach. XI Workshop on Statistics, Mathematics and Computations, July 11-12, 2017, Portalegre, Portugal (Plenary talk).</b>
<b>Mahmoudvand, R. Modelling Financial Data Using Modified Laplace Distribution. Satellite ISI-CRA Meeting, July 10, 2017, Lisbon, Portugal (Plenary talk).</b>
<b>Mahmoudvand, R. A New Parsimonious Vector Forecasting Model in Singular Spectrum Analysis. ISBIS Conference, June 8-10, 2016, Barcelona, Spain (Invited speaker).</b>
<b>Mahmoudvand, R. On the Possibility of using Multivariate Singular Spectrum Analysis for the Mortality Forecasting, ISI2015, 2015/7/26 to 2015/7/30 , in Rio de Janeiro, Brazil (Invited talk).</b>
<b>Mahmoudvand, R. Some Theoretical Aspects of the Multivariate Singular Spectrum Analysis, ISBIS Satellite Conference with Focus on Quality Control and Improvement, July 22- July 24, 2015, University of Campinas, Brazil.</b>
<b>Mahmoudvand, R and Aziznasiri, S. A New Modification on the Bonus-Malus System in Automobile Insurance, 8th Conference in Actuarial Science &amp; Finance on Samos, 29 June-1 July, 2014, Samos, Greece.</b>
<b>Mahmoudvand, R and Aziznasiri, S. Bonus-Malus System in Open and Closed Portfolio. International Cramer Symposium on Insurance Mathematics, June 11-14, 2013, Stockholm University, Sweden.</b>
<b>Mahmoudvand, R and Zokaei, M. A Filter Based Correlation Coefficient by Using Singular Spectrum Analysis. The 31th Annual International Symposium on Forecasting, University of Economics, Prague, 26-29 Jun 2011.</b>

#### **Altre attività scientifiche**

<b>Hassani, H. and Mahmoudvand, R. (2018). Singular Spectrum Analysis Using R. Springer.</b>
<b>Mahmoudvand, R., &amp; Oliveira, T. A. (2018). On the application of sample coefficient of variation for managing loan portfolio risks. In Recent Studies on Risk Analysis and Statistical Modeling (pp. 87-97). Springer, Cham.</b>
<b>Oliveira, T.; Oliveira, A.; Mahmoudvand, R.; Ravishankar, N.; and Banks, D. ISBIS 2016 Meeting on Statistics in Business and Industry (Book of Abstract), Barcelona, Spain, June 2016.</b>
<b>Mahmoudvand, R and Aziznasiri, S. (2014). Bonus-Malus systems in open and closed portfolios. In Modern Problems in Insurance Mathematics (pp. 261-271). Springer International Publishing.</b>

#### **Ulteriori informazioni pertinenti**

<b>VP for membership, International Society for Business and Industrial Statistics (ISBIS), 2023-2025.</b>
<b>Lead organizer, First, Second and Third “Event on Play with Real Data”, (virtual on 2021, Feb 2023 and Oct 2023).</b>
<b>Lead organizer, Workshop on Common Errors in Statistical Studies, (virtual on 25 Feb 2022-03 Mar 2022).</b>
<b>Scientific Program Committee, Young Business and Industrial Statisticians Workshop on Recent Advances in Data Science and Business Analytics (y-BIS 2019), Istanbul, 25-28 Sep, 2019.</b>

<b>Chair of Scientific committee, Conference on Modern Method in Insurance Pricing and Industrial Statistics, Hamedan, Sep 3-5, 2017.</b>
<b>Scientific committee member, 7th International Conference on Risk Analysis (ICRA7), Chicago, USA, May 3-5, 2017.</b>
<b>Editorial member of the Journal of Statistics, Optimization and Information Computing (SOIC) from 2013 to now</b>
<b>Board member of Actuarial Society of Iran, 2018-2020 and 2020-2022.</b>
<b>Editor-in-chief, Official Newsletter of the ASI, 2018-2021.</b>
<b>Council member of International Society for Business and Industrial Statistics (ISBIS), 2017-2021.</b>

Luogo, data e firma