

**Mohsen Mohammadzadeh Darrodi**

**Professor in Statistics**

**Tarbiat Modares University**



**Date of Birth:** 5th April 1957

**Place of Birth:** Mashhad

**Citizenship:** Iranian

**Marital Status:** Married with two children

**Mailing Address:** Department of Statistics, Tarbiat Modares University, P.O. Box 14115-134, Tehran - Iran.

**Phone and Fax (office):** +98 (021) 82883483

**Mobile:** +98 9122066712

**E-mail:** mohsen\_m@modares.ac.ir

**Homepage:** [www.modares.ac.ir/~mohsen\\_m](http://www.modares.ac.ir/~mohsen_m)

**Google Scholar:** [goo.gl/SVd6Vq](http://goo.gl/SVd6Vq)

**OrcID:** [orcid.org/0000-0002-2361-6145](http://orcid.org/0000-0002-2361-6145)

**Web of Science ResearcherID:** I-7784-2018

**Scopus Author ID:** [scopus.com/authid/detail.uri?authorId=6507166315](http://scopus.com/authid/detail.uri?authorId=6507166315)

**ResearchGate:** [www.researchgate.net/profile/Mohsen-Mohammadzadeh](http://www.researchgate.net/profile/Mohsen-Mohammadzadeh)

**Linkedin Profile:** [linkedin.com/in/mohsen-mohammadzadeh-4aa2358](http://linkedin.com/in/mohsen-mohammadzadeh-4aa2358)

**Elmnet:** <https://elmnet.ir/eid/N-0020-8989>

**Brief Review:**

Strong support professional with a Doctor of Philosophy (PhD) focused on Spatial Statistics from the University of Leeds in the UK., Has experience in education, research and execution in higher education. I am skilled in Statistical Inference, Bayesian Statistics,

Statistical Modeling, Spatial and Spatio-Temporal Data Analysis, Spatial Survival Data Analysis, Data Science and Machine Learning.

### **Academic Qualifications:**

- 1- 1975 Diploma in Mathematics, Danesh Bozorgnia High School, Mashhad, Iran.
- 2- 1980 B.SC. in Statistics and Computer, Ferdowsi University, Mashhad, Iran.
- 3- 1986 M.SC. in Statistics, Tarbiat Modares University, Tehran, Iran.
- 4- 1996 PhD in Statistics, The University of Leeds, UK.

### **Appointments Held:**

- 1- 1986-1992 Lecturer in Tarbiat Modares University.
- 2- 1996-2003 Assistant Professor in Tarbiat Modares University.
- 3- 2003-2011 Associate Professor in Tarbiat Modares University.
- 4- 2009-2009 Academic Visitor in the Department of Statistics, Leeds University.
- 5- 2011-Present Professor in Tarbiat Modares University.

### **Specialization:**

M.Sc. Thesis: "Empirical Bayes Estimation on Exponential Family", supervised by Professor M. R. Meshkani.

PhD Thesis "Kriging and Likelihood Methods in Statistical Spatial Data, supervised by Professor J. T. Kent".

I am interested in Spatial and Spatio-Temporal Statistics, Statistical Inference, Bayesian Statistics, Spatial Survival Data Analysis, and Data Science.

### **Courses Taught at MSc Level:**

- 1- Statistical Inference
- 2- Statistical Methods
- 3- Engineering Probability and Statistics
- 4- Statistics and Research Methods
- 5- Statistics for Business Decisions

- 6- Statistical Analysis
- 7- Spatial Statistics (1, 2)
- 8- Analysis of Spatial and Spatio-Temporal Data

### **Courses Taught at PhD Level:**

- 1- Advanced Statistical Inference (1, 2)
- 2- Advanced Statistical Methods
- 3- Advanced Topics in Applied Statistics
- 4- Advanced Engineering Statistics

### **Institutional Member:**

- 1- American Statistical Association (ASA).
- 2- International Statistical Institute (ISI).
- 3- International Association for Mathematical Geology (IAMG).
- 4- Iranian Statistical Society (ISS).
- 5- Iranian Mathematical Society (IMS).
- 6- Union of Iranian Societies of Mathematical Sciences (UISMS)
- 7- Association of European Operational Research Societies (EURO)

### **Editorial Board Member:**

- 1- Journal of Statistical Sciences, Iranian Statistical Society (Editor in Chief).
- 2- Journal of Mathematical Sciences & Informatics, Research Group of the ACECR.
- 3- Journal of Sciences, Islamic Republic of Iran.
- 4- Journal of Information Analysis.

### **Administrative Experience:**

- 1- 1988-1991: Deputy in Administration and Financial Affairs of Engineering Faculty at Tarbiat Modares University.
- 2- 1996-2007: Head of Department of Statistics at Tarbiat Modares University.
- 3- 1997-2001: General Director of Free Education in Iran's Ministry of Science, Research and Technology.

- 4- 2000-2002: Secretary of the Sixth International Statistics Conference, August 26-28, 2002, Tarbiat Modares University with Cooperation the Iranian Statistical Society, Tehran, Iran.
- 5- 2001-2006: General Director of Supervision and Evaluation Office of Higher Education in the Ministry of Science, Research and Technology of Iran.
- 6- 2001-Present: Secretary of the Committee for the Excellences of Basic Sciences in Universities of Iran.
- 7- 2002-2006: Member of Executive Council of Iranian Statistical Society, Tehran, Iran.
- 8- 2003-2007: Minister Advisor of the Iranian Ministry of Science, Research and Technology.
- 9- 2008-Present: Member of Executive Council of Iranian Statistical Society, Tehran, Iran.
- 10-2012-2014: President of Executive Council of Iranian Statistical Society, Tehran, Iran.
- 2014-2016: Inspector of Iranian Statistical Society, Tehran, Iran.
- 11-2014-2018: Deputy of Support and Human Resources of Tarbiat Modares University, Tehran, Iran.
- 12-2014-2016: Inspector of Iranian Statistical Society, Tehran, Iran.
- 13-2016-2020: Member of Executive Council of Iranian Statistical Society, Tehran, Iran.
- 14-2020-Present: Inspector of Iranian Statistical Society, Tehran, Iran.
- 15-2018-Present: Deputy for Monitoring and Assessment, University of Applied Science and Technology, Tehran, Iran.
- 16-2019-Present: Manager of Spatial Data Analysis Center of Excellence at Tarbiat Modares University, Tehran, Iran.

### **Scientific Committee Memberships:**

- 1- 1999-2001: Member of the Scientific Committee of the Sixth International Statistics Conference, Tehran, Iran.
- 2- 1998-2005: Member of Special Committee for Statistics, High Council for Planning, Ministry of Science, Research and Technology, Iran.
- 3- 2002-2003: Member of the Fifth Iranian Conference on Fuzzy Systems Scientific Committee, Tehran, Iran.
- 4- 2002-2004: Member of the Seventh Statistics Conference Scientific Committee, Tehran, Iran.
- 5- 2004-Present: Editor in Chief of the Journal of Statistical Sciences, a Publication of the Iranian Statistical Society.
- 6- 2004-2009: Editorial Board of the Andishe-ye-Amari, a Publication of the Iranian Statistical Society.
- 7- 2004-2006: Editorial Board of the Student Statistical Journal of Neda, a Publication of the Iranian Statistical Society.

8- 2004-Present: Editorial Board of the Journal of Mathematical Sciences and Informatics.

9- 2005-Present: Member of the Scientific and Research Council of the Statistical Research Center, Tehran, Iran.

10-2005-Present: Member of the Scientific Council of the Statistical Encyclopedia. Ministry of Science, Research and Technology, Tehran, Iran.

11-2005-Present: Member of Ordered and Spatial Data Center of Excellence of Ferdowsi University, Mashhad, Iran.

12-2006-Present: Member of Supervision and Evaluation Council of the Faculty of Basic Sciences. Tarbiat Modares University, Tehran, Iran.

13-2006-2008: Member of the General Educational Schematization Commission of University, Tarbiat Modares University, Tehran, Iran.

14-2008-2010: Member of Scientific Committee of 10th Statistics Conference, Tabriz, Iran.

15-2008-Present: Executive Council of the Iranian Statistical Society, Tehran, Iran.

16-2010-2012: Member of Scientific Committee of 11th Statistics Conference, Tehran, Iran.

17-2010-2012: Member of Special Committee for Mathematical Sciences, High Council for Planning, Ministry of Science, Research and Technology, Iran.

18-2012-Present: Member of Commission for the Advancement of Mathematics, Academy of Sciences, Islamic Republic of Iran, Iran.

19-2012-Present: Member of Special Commission of the High Council for Statistics, Iran.

20-2012-Present: Editor in Chief of the Iranian Journal of Official Statistics Studies, a Publication of the Statistical Center of Iran.

21-2014-2016: Member of Scientific Committee of 13th Statistics Conference, Kerman, Iran.

22-2014-2016: Member of Tarbiat Modares University Audit Board.

23-2014-2016: Chairman of the Expert Commission of Audit Board of Tarbiat Modares University.

24-2015-Present: Member of the Basic Sciences Commission of the Science, Research and Technology Council.

25-2015-Present: Member of the Specialized Group for Planning and Developing Statistics, Ministry of Science, Research and Technology, Iran.

26-2016-Present: Member of the Expert Commission of Audit Board of Tarbiat Modares University.

27-2016-Present: Member of the Specialized Group for Statistics Planning and Development, Ministry of Sciences, Research and Technology.

28-2016-Present: Member of the Audit Board of Shahid Beheshti University.

29-2016-2017: Member of Scientific Committee of 2<sup>nd</sup> Seminar on Spatial Statistics and Its Applications, Shahrood, Iran.

30-2016-2018: Member of Scientific Committee of 14th Statistics Conference, Shahrood, Iran.

31-2018-2019: Member of Scientific Committee of 5th Seminar on Copula Theory and its Application, Ferdowsi University, Mashhad, Iran.

32-2018-2019: Member of Scientific Committee of 3rd Seminar on Spatial Statistics and Its Applications, Zanjan, Iran.

33-2018-2020: Member of Scientific Committee of 15th Statistics Conference, Yazd, Iran.

34-2018-Present: Editorial Board of the Journal of Sciences, Islamic Republic of Iran.

35-2018-2021: Member of the Professional Council of Education, University of Scientific-Applied, Tehran, Iran.

36-2018-2021: Member of Appointment Committee, University of Scientific-Applied, Tehran, Iran.

37-2018-2021: Member of Measurement and Acceptance Council, University of Scientific-Applied, Tehran, Iran.

38-2018-2021: Member of the Supervisory and Evaluation Council, University of Scientific-Applied, Tehran, Iran.

39-2018-2021: Member of the Council for Special Cases Review, University of Scientific-Applied, Tehran, Iran.

40-2019-Present: Dean of Center of Excellence in Spatial Data Analysis at Tarbiat Modares University, Tehran, Iran.

41-2019-Present: Member of Scientific Committee of Professional Competence of the High Council of Training.

42-2019-2020: Member of Scientific Committee of 15th Statistics Conference, Yazd, Iran.

43-2020-Present: Member of Scientific-Applied Special Committee of the Higher Education Development Council, Ministry of Sciences, Research and Technology.

44-2020-2021: Head of Scientific Committee of 4th Spatial Statistics Seminar and Its Applications, International Institute of Earthquake Engineering and Seismology, Tehran, Iran.

45-2021-2022: Member of Scientific Committee of 16th Statistics Conference, Mazandaran, Iran.

### **List of MSc Thesis Supervision:**

- 1- 1998 Alimohammadi, Roshanak: Comparison of Splines with Polynomial Regression.
- 2- 1998 Azamjah, Nasrin: Spline in Generalized Linear Model.
- 3- 1999 Benam Rashi, Asghar: Empirical Bayes Estimation for Contaminated Data.
- 4- 1999 Kavoosi, Amir: Kriging Method in Spatial Data.
- 5- 2000 Safari, Rahim: Evaluation and Comparison of Spatial Interpolators.
- 6- 2000 Jafari Khaledi, Majid: Estimation of Covariance for Spatial Regression Residuals.

7- 2001 Gholami, Ali: Estimation of Extreme Value Index.

8- 2001 Heydari, Aliakbar: Statistical Modeling of Exceedances over a Threshold.

9- 2002 Mohammadian, Ali: Detection Methods of Spatial Data Outliers.

10-2002 Salehi, Reza: Probability Density Estimation with Kernel Estimators and B-Splines.

11-2003 Hooman, Alireza: Nonlinear Discrimination via ACE and Projection Pursuit.

12-2003 Zargar, Mansour: Prediction in a Lifetime Model when Sample Size is Variable.

13-2003 Fallah, Afshin: Statistical Methods for Data Mining.

14-2004 Mohammadi, Malihe: Probability Density Estimation Using Wallets.

15-2004 Taatizadeh, Akram: Comparison of Model Selection Methods and Estimation of Lifetime Distribution.

16-2004 Karimi, Omid: Bayesian Analysis of Regression Models with Spatially Auto Correlated Errors.

17-2004 Hosseini, Fatemeh: Bayesian Fuzzy Prediction for Spatial Data.

18-2004 Moradifar, Roya: Nonlinear Spatial Prediction.

19-2005 Motarjem, Kiomars: Conditional Simulation for Spatial Data Analysis.

20-2005 Aliakbari, Hosein: Using E-Hub within Supply Chain in OEM Industries.

21-2006 Moradi, Sardar: Testing for Separability and Invariant Space-Time Covariance Functions.

22-2006 Aminmoghadam, Atefeh: Kriging and Fuzzy Sets for Image Processing.

23-2006 Kiapour, Azadeh: Indicator Kriging for Spatial Analysis of Hard and Soft Data.

24-2006 Sharafi, Maryam: Temporal Kriging with External Drift.

25-2006 Afshar, Samaneh: Evaluation Methods for Uncertainty of Variogram Estimator in Spatial Data Analysis.

26-2006 Rahmani, Rabiah: Measuring Risk Criteria for Information Disclosure.

27-2008 Omidi, Mehdi: Copulas and their Application for Drought Modeling.

28-2008 Mohammadi, Anvar: Robust Methods in Spatial Data Analysis.

29-2008 Rezaeitabar, Vahid: Spatial Logistic and Probit Regression Models for Analysis of Frosting Data.

30-2009 Kheradmandi, Ameneh: Generalizations of Skew t-Normal Distribution and their Application in Modeling of Some Petroleum-Related Heavy Metals in the Persian Gulf Data.

31-2010 Mahmodian, Behzad: Analysis of Spatial Extreme Values.

32-2011 Behshad, Elham: Assessment of Properties of the Space-time Covariance Function.

33-2011 Mousavi, Seyedeh Somayeh: Effect Evaluation of Different Methods of Spatial-Temporal Trend Modeling on Covariance Function Estimation.

34-2012 Shahbazi, Leyla: Hierarchical Modeling of Spatial Extreme Values.

35-2012 Rasouli, Hamidreza: Analysis of Spatio-Temporal Autoregressive Models.

36-2012 Ghayoumi, Zahra: Analysis of Spatial Latent Gaussian Models Using Integrated Nested Laplace Approximation.

37-2012 Gholivand, Kobra: Bayesian Analysis of Structured Additive Regression Models Using Integrated Nested Laplace Approximation.

38-2012 Bidarebakht, Hadis: Determination of the Optimal Spatial Sampling Design for Rainfall Prediction in Khuzestan Province.

39-2014 Mahdiyanfard, Nasrin: Spatial Melding Model and Its Application in Analysis of Ozone Data.

40-2014 Karami, Hamidreza: Analysis of Economic Factors Affecting Crimes Against Persons and Property Using Dynamic Spatial Panel Models.

41-2015 Sasani, Sara: Testing for Spatial Errors Correlation in Regression Models for Panel Data,

42-2015 Naseri, Zahra: Spatial Small Area Estimation and Prediction for Amount of Citrus Product in Fars Province

43-2015 Abyar, Ameneh: Spatial Survival Modeling and Analysis of Esophageal Cancer Data.

44-2016 Islami, Meysam: Spatio-Temporal Flexible Modeling with Smooth Temporal Base Functions and Imputation of Missing Data.

45-2016 Beigmohammadi, S. Bayesian Variational Method for Spatial Data Analysis.

46-2017 Esmati, Meysam: Spatio-Temporal Prediction for Nonstationary Nonseparable Random Fields.

47-2017 Fathkhani, Ali: Beta Binomial Kriging for Spatial Proportions.

48-2017 Abi, Mahnegan: Spatial Dynamic Population and Network Sampling Design.

49-2018 Sadeghi, Neda: Autoregressive Moving Average Models for Analysis of Spatio-Temporal Data.

50-2019 Saadati, Samira: Tucker Decomposition Analysis of Nonstationary and Nonseparable Random Fields.

51-2020 Moghadam, Mohammad: Nonparametric Spatial Analysis for Risk Mapping.

52-2021 Malaeke, Narges: Estimation by a Variable Selection Approach in Sparse High Dimensional Models.

53-2021 Kazemi, Kimia: Spatially Varying Coefficient Inequalities on Breast Cancer Survival Varies by Location.

54- 2021 Nahardani, Zahra: Bayesian Analysis of Spatial Survival Data with Explicit Modeling of Spatial Correlation Structure.

55-2022 Shoomali, Javad: Evaluation of CAPULA Bias Correction Methods for Satellite Precipitation Products in the Karoon Basin, (Joint Supervised with Alireza Massah, Aboureihan College, Tehran University.

56-2022 Amiri Fatehah: Partially Linear Additive Regression Model for High-Dimensional Spatial Data.

57-2022 Sajedeh Lashgari: Modeling Risk Factors For Disease Deaths and Their Predicting Mortality Rates.

58-2024 Shahin Vaezi: Proposing a Spatio-Temporal Neural Network Model for Traffic Prediction by Considering Weather Conditions.

59-2025 Sarani Moghadam Tayebeh: Spatial Data Analysis in the Presence of Outliers with Spatial Autocorrelation Quantile Regression.

### **List of Postdoc Supervision:**

1- 2019 Kiomars Motarjem: Spatial Analysis of Survival Data, Department of Statistics, Tarbiat Modares University.

### **List of PhD Thesis Supervision:**

- 1- 2002 Waghei, Yadollah: Nonstationary Spatial Data Analysis and its Application in Geographic Epidemiology of Diseases, Department of Statistics, Tarbiat Modares University.
- 2- 2005 Khaledi, Majid: Bayesian Prediction in Spatial Data Analysis, Department of Statistics, Tarbiat Modares University.
- 3- 2008 Rivaz, Firoozeh: Analysis of Spatiotemporal Data, Department of Statistics, Tarbiat Modares University.
- 4- 2008 Iranpanah, Nasrollah: Bootstrap Methods for Spatial Data Analysis, Department of Statistics, Tarbiat Modares University.
- 5- 2009 Fallah, Afshin: Record Linked and Statistical Analysis of Liked Data, Department of Statistics, Tarbiat Modares University.
- 6- 2010 Karimi, Omid: Spatial Prediction for Closed Skew-Gaussian Random Field, Department of Statistics, Tarbiat Modares University.
- 7- 2011 Hosseini, Fatemeh: Skew Gaussian Random Effects in Spatial Generalized Linear Mixed Models, Department of Statistics, Tarbiat Modares University.
- 8- 2011 Baghishani, Hossein: Analyzing Spatial Generalized Linear Mixed Models via Data Cloning and Composite Likelihood Methods, Department of Statistics, Tarbiat Modares University.
- 9- 2015 Omidi, Mehdi: Spatial Data Analysis Using Copula Functions, Department of Statistics, Tarbiat Modares University.
- 10-2016 Mahmoudian, Behzad: Bayesian Modeling and Prediction for Spatial Extreme Values, Department of Statistics, Tarbiat Modares University.
- 11-2016 Mohammadmehdi Saber: Generalized Skew Laplace Random Fields: A Survey of Spatial Interpolation, Department of Statistics, Shiraz University, Joint Supervised with Professor Alireza Nematollahi.

12-2016 Motarjem Kiomars: Survival Models with Non-Gaussian Random Effects, Department of Statistics, Tarbiat Modares University.

13-2017 Lida Kalhori: Spatial Analysis of Beta Generalized Linear Mixed Models, Department of Statistics, Tarbiat Modares University.

14-2017 Ramin Khavarzadeh: Spatial Balanced Sampling, Department of Statistics, Tarbiat Modares University.

15-2017 Zohreh Fallah: Analysis of Augmented Beta Regression Mixed Models Using Skew Random Effects, Department of Statistics, Tarbiat Modares University.

16-2017 Seid Reza Hosseini Shojaei: Poisson Kriging Prediction for Analysis of Spatial Count Data, Birjand University, Joint Supervised with Professor Yadola Waghei.

17-2020 Samira Zahmatkesh: Combining Models for Spatio-Temporal Data Analysis and Imputation of Missing Values, Department of Statistics, Tarbiat Modares University.

18-2023 Elahe Lotfian: Multi-Objective Optimization Methods for Spatial Sampling, Department of Statistics, Tarbiat Modares University.

19-2023 Kobra Gholizadeh: Approximate Bayesian Inference for Analysis of Beta Regression Models, Department of Statistics, Tarbiat Modares University.

20-2023 Nasrin Ebrahimi: Modelling Spatial Survival Data using Copula Functions, Department of Statistics, Tarbiat Modares University.

21-2025 Sepideh Asadi: Spatial Modeling of Discrete Zero-Inflated Survival Data, Tarbiat Modares University.

22-2025 Salehi Leyla: Penalized Composite Maximum Likelihood Method in Spatial Generalized Linear Mixed Models, Tarbiat Modares University.

### **List of PhD Thesis Advisory:**

- 1- 2000 Darvish, H. Designing Staff Development Management and Its Relationship with the Efficiency of the Organization, Faculty of Management, Tehran University.
- 2- 2000 Rezazadeh, B. A Survey on Effective Strategies of Marketing, Faculty of Management, Tehran University.
- 3- 2004 Sheikh M. J. A Survey of the Importance of Financial Fraud Warning Signs By Factor Analysis, Faculty of Management, Tehran University.
- 4- 2004 Shahabifar, M. Estimation of Regional Evapotranspiration Using Geostatistics and Geographic Information System in Tehran Province, Iran, Department of Irrigation and Drainage Engineering, Tarbiat Modares University.
- 5- 2005 Saeedi, V. A. Examining the Superiority of Comprehensive Income as a Measure of Firm Performance, Faculty of Management, Tehran University.
- 6- 2005 Alimohammadi, R. Response Error Modeling on the Household Income and Expenditure Survey, Department of Statistics, Tarbiat Modares University.

- 7- 2006 Pourtaheri, R. A New Method in Model Detection of the Spatial Point Patterns, Department of Statistics, Tarbiat Modares University.
- 8- 2006 Zare, D. Computer Simulation of Rough Rice Drying in a Batch Dryer, Agricultural Engineering Department, Tarbiat Modares University, Tehran University.
- 9- 2006 Massah, A. R. Risk Assessment of Climate Change and its Impact on Water Resources; A Case Study on Zayandeh Rud Basin, Department of Water Structures Engineering, Tarbiat Modares University.
- 10- 2006 Mansouri, S. Determination of Maximum Entropy of Probability Distribution under Different Restrictions, Department of Statistics, Tarbiat Modares University.
- 11- 2008 Kavousi, A. Bayesian and Empirical Bayes Analysis of Multivariate Spatial Data, Department of Statistics, Tarbiat Modares University.
- 12- 2008 Mojtabahzadeh, V. Check the Areas of Responsibility of the Independent Auditors and the Independent Auditors' Audit Services from the Perspective of Users, Faculty of Management, Tehran University.
- 13- 2009 Naghizadeh, S. The Study of Emissions Dependency in States of the Hidden Markov Models and its Application in Bioinformatics, Department of Statistics, Tarbiat Modares University.
- 14- 2010 Aghamohammadi, A. Bayesian Multiple Comparison, Department of Statistics, Tarbiat Modares University.
- 15- 2011 Javadi, P. S. Risk Prediction and Assessment of Groundwater Pollution using Indexing and Analytical Methods and Monte Carlo Technique, Faculty of Agriculture, Tarbiat Modares University.
- 16- 2012 Ganji, Z. Temporal and Spatial Risk Analysis for Agriculture Loss in Floodplains, Department of Water Structures Engineering, Tarbiat Modares University.
- 17- 2012 Rezaeitabar, V. Prediction of Protein Secondary Structure Using Spatial Statistics, Department of Statistics, Tarbiat Modares University.
- 18- 2014 Moradkhani, A. Reliability Modeling of Distribution System Components Using Failure and Maintenance Data, School of Electrical and Computer Engineering, Tarbiat Modares University.
- 19- 2017 Bromandi, M. Assessment of Soil Pollutions by Heavy Metals with Geostatistics Methods, Department of Geology, Tarbiat Modares University.
- 20- 2017 Hosseinpuri, M. Analysis of Spatial Latent Variable Models with Nonparametric Bayesian Approach, Department of Statistics, Tarbiat Modares University.

### **List of Published Books:**

- 1- **Mohammadzadeh, M.** (2012), *Spatial Analysis and its Applications*, Tarbiat Modares University Press, Tehran, Iran.

2- **Mohammadzadeh, M.** and Fallah, A. (2001), Translation of *Sampling Theory and Methods*, S. Sampath, Alpha Science.

### List of Published Papers in Journals:

- 1- Kent, J. T. and **Mohammadzadeh, M.**, (1999), Spectral Approximation to the Likelihood for an Intrinsic Gaussian Random Field, *Journal of Multivariate Analysis*, **70**, 136-155.
- 2- **Mohammadzadeh, M.**, (1999), Generalized Covariance Function for Universal Kriging, *Andishe-ye Amari*, **4**, No. 2 18-23, (in Persian).
- 3- Kent, J. T. and **Mohammadzadeh, M.**, (2000), Global Optimization of the Generalized Cross-Validation Criterion, *Statistics and Computing*, **10**, No. 3, 231-236.
- 4- **Mohammadzadeh, M.**, (2001), "An Empirical Bayes Estimation Problem", *Bulletin of the International Statistical Institute, 53rd Session, Seoul*, 453-454.
- 5- **Mohammadzadeh, M.** and Waghei, Y., (2002), Optimal Number of Lags for Exponential Variogram Modeling, *Journal of Science Kharazmi University*, **2**, 19-27.
- 6- **Mohammadzadeh, M.**, Kazemnejad, A., Faghihzadeh, S. and Waghei, Y., (2003), Using Kriging for Statistical Disease Mapping of Tuberculosis, *Journal of Research in Medical Science, Isfahan University*, **8**, 2, 1-7.
- 7- **Mohammadzadeh, M.** (2003), An Empirical Bayes Estimator for Weibull Distribution, *Journal of Statistical Theory and Applications*, Vol. 2, 125-130.
- 8- **Mohammadzadeh, M.** (2003), Empirical Bayes Estimation with Kernel Density Estimators, *Bulletin of the International Statistical Institute, Berlin, Germany*, Book 2, 73-74.
- 9- Naser, I., Manteghian, M., Bastani, D. and **Mohammadzadeh, M.** (2003), A Comprehensive Empirical Correlation for Prediction of Supersolubility and Width of the Metastable Zone in Crystallization, *Iranian Journal Chemistry and Chemical Engineering*, **22**, 23-34.
- 10- **Mohammadzadeh, M.**, and Safari, R., (2003), Comparison of Spatial Interpolation Methods, *Journal of Science Kharazmi University*, **3**, 243-250.
- 11- **Mohammadzadeh, M.**, and Salehi, R., (2004), Probability Density Estimation with Kernel and B-Spline Methods, *Journal of Science, Tehran University*, **30**, 67-77.
- 12- Khaledi, M. J. and **Mohammadzadeh, M.**, (2004), Bayesian Prediction for a Trans Gaussian Spatial Model, *Journal of Science, Tehran University*, **30**, 133-144.
- 13- **Mohammadzadeh, M.** (2004), Empirical Bayes Estimation with Kernel and Spline Density Estimators for One Parameter Exponential Family, *Journal of Institute of Mathematics & Computer Sciences*, **17**, No. 3, 215-225.
- 14- Vahidi-Asl, M. Q., **Mohammadzadeh, M.** and Ghorbani, M. (2004), Model Selection for Probabilistic Clustering Using Bayesian Information Criterion, *Andishe-ye-Amari*, **9**, No. **2**, 21-27.

15-Khaledi, M. J. and **Mohammadzadeh, M.**, (2005), Bayesian Spatial Prediction for a Log-Gaussian Random Field with Noisy Observations, *Science Research Bulletin of Isfahan University*, **21**, No 1, 67-76.

16-Shahabifar, M., Kouchehzadeh, M., **Mohammadzadeh, M.** and Mirlatifi, M. (2005). Determination of Sugar Beet Water Requirement in Tehran Province Using Geostatistics Methods, *Journal of Sugar Beet*, **20**, No. 2, 133-147.

17-Mansourioury, S., Pasha, E. and **Mohammadzadeh, M.** (2005). Determination of Maximum Bayesian Entropy Probability Distribution, *Journal of Sciences, Islamic Republic of Iran*, **16**, No. 4, 339-345.

18-**Mohammadzadeh, M.** and Waghei, Y. (2005), Some Graphical Methods for Spatial Outlier Detections, *Andishe-ye-Amari*, **10**, No. 1, 3-9.

19-**Mohammadzadeh, M.** and Fallah, A. (2005), Statistical Methods for Data Mining, *Andishe-ye-Amari*, **10**, No. 1, 47-54.

20-Khaledi, M. J. and. **Mohammadzadeh, M.**, (2006), Bayesian Prediction in Spatial Data Analysis, *Journal of Mathematical Sciences and Informatics*, **1**, No. 1, 33-46.

21-Khaledi, M. J. and **Mohammadzadeh, M.**, (2006), Hierarchical Bayes Spatial Prediction for a Noisy Log-Gaussian Model, *Journal of Statistical Theory and Applications*, **5**, No. 1, 9-16.

22-Zare, D., Minaei, S., **Mohammadzadeh, M.**, and Khoshtaghaza, M., (2006), Computer Simulation of Rough Rice Drying in a Batch Dryer, *Energy and Conversion & Management*, **47**, 3241-3254.

23-Iranpanah, N., and **Mohammadzadeh, M.**, (2006), Separate Block Bootstrap Method in Spatial Statistics, *Journal of Science Kharazmi University*, **5**, No. 4, 653-665.

24-Pourtaheri, R., Vahidi-Asl, M. Q. and **Mohammadzadeh, M.**, (2006), Quadrate Versus Distance Methods for Complete Spatial Randomness Tests, *Journal of Statistical Theory and Applications*, **5**, No. 4, 351-361.

25-Rivaz, F., **Mohammadzadeh, M.**, and Khaledi, M., (2007), Empirical Bayes Prediction for Space-Time Data under Separable Model, *Journal of Statistical Sciences*, **1**, No. 1, 45-59.

26-**Mohammadzadeh, M.**, and Hosseini, F., (2007), Bayesian Fuzzy Spatial Prediction, *Journal of Science, Tehran University*, **33**, No. 3, 1-7.

27-Iranpanah, N. and **Mohammadzadeh, M.**, (2007), Precision Measures Estimation of Kriging with Spatial Block Bootstrap Method, *Journal of Science, Tehran University*, **33**, No. 3, 19-24.

28-Karimi, O. and **Mohammadzadeh, M.**, (2007), Bayesian Estimation of the Parameters of Regression Model with Spatially Autocorrelated Errors, *Journal of Science, Tehran University*, **33**, No. 3, 33-38.

29-**Mohammadzadeh, M.**, Iranpanah, N., and Afshar, S., (2007), Bias Correction of Variogram Parameters Estimates by Separate Block Bootstrap Method for Spatial Prediction, *Journal of Science, Shahid Chamran University*, **18**, 46-52.

30-**Mohammadzadeh, M.**, and Hooman, A., (2008), Flexible Discriminate Analysis via Nonparametric Regression, *Science Research Bulletin of Isfahan University*, **32**, No. 3, 15-26.

31-**Mohammadzadeh, M.**, and Kiapour, A., (2008), Spatial Prediction of Hard and Soft Data for Preparing Freezing Probability Map, *Amirkabir Journal of Scientific and Research*, Vol. 39, No. 1, 37-44.

32-Naghizadeh, S., Pezeshk, H., Sadeghi, M., **Mohammadzadeh, M.**, and Eslahchi, C., (2008), A Modification on a left-to-right and right-to-left Dependency Structure Prediction, *Journal of Science University of Tehran*, **34**, No. 3, 61-66.

33-Azizpour, J., Banazadeh, M. R. and **Mohammadzadeh, M.**, (2008), Caspian Sea Level Time Series Analysis Using Satellites Altimetry Data, *Journal of Marine Science and Technology*, **7**, No. 1,2, 87-98.

34-Kavousi, A., Meshkani, M. R. and **Mohammadzadeh, M.**, (2009), Spatial Analysis of Relative Risk of Lip Cancer in Iran: A Bayesian Approach, *Environmetrics*, **20**,347-359.

35-Iranpanah, N., **Mohammadzadeh, M.**, Vahidi-Asl, M. Q. and Yassaghi, A. (2009), Spatial Data Analysis of Finite Strain Data Across a Thrust Sheet Using R Package, *Computers & Geosciences*, **35**, 626-634.

36-Iranpanah, N., **Mohammadzadeh, M.** and Vahidi-Asl, M. Q. (2009), Block Size in Separate Block Bootstrap to Estimate the Variance of Sample Mean for Lattice Data, *Journal of Sciences, Islamic Republic of Iran*, **20**, No. 4, 355-364.

37-Fallah, A. and **Mohammadzadeh, M.**, (2009), Probabilistic Record Linkage for Persian Records with Missing Data, *Journal of Statistical Research of Iran*, **4**, No. 1, 91-107.

38-Sharifi, M. and **Mohammadzadeh, M.**, (2009), Spatiotemporal Kriging with External Drift, *Journal of Statistical Research of Iran*, **4**, No. 1, 15-28.

39-Aghamohammadi, A. **Mohammadzadeh, M.** and Meshkani, M. R., (2009), A Bayesian Approach to Successive Comparisons of Treatment Effects, *Journal of Data Science*, **8**, No. 4, 541-553.

40-Karimi, O., Omre, H. and **Mohammadzadeh, M.**, (2010), Bayesian Closed-Skew Gaussian Inversion of Seismic AVO Data into Elastic Material Properties, *Geophysics*, **75**, No.1, R1-R11, DOI: 10.1190/1.3299291.

41-Omidi, M., **Mohammadzadeh, M.**, and Morid, S. (2010), The Probabilistic Analysis of Drought Severity-Duration in Tehran Province using Copula Functions, *Iranian Journal of Agricultural Sciences*, **41**, 95-102.

42-Fallah, A. and **Mohammadzadeh, M.**, (2010), Bayesian Regression Analysis with Linked Data Using Mixture Normal Distributions, *Statistical Papers*, **51**, 421-430.

43-Fallah, A., and **Mohammadzadeh, M.**, (2010), Error Reduction with Bayesian Model Averaging, *Andish-e-Amari*, **14**, 11-22.

44-Kheradmandi, A., **Mohammadzadeh, M.**, and Sanjari, F. N., (2010), Generalizations of the Skew t-Normal Distribution and their Properties, *Journal of Sciences, Islamic Republic of Iran*, **21**, No. 4, 343-351.

45-Omidi, M. and **Mohammadzadeh, M.**, (2010), Likelihood and Empirical Bayes Modelling for Drought via Copula, *Journal of Science Kharazmi University*, **10**, 643-654.

46-Kheradmandi, A., **Mohammadzadeh, M.**, and Sanjari, F. N., (2010), A Generalization of Skew t-Normal Distribution and Modeling of Nickel Pollution in Shadegan Wetland, *Journal of Science Kharazmi University*, **10**, 673-682.

47-Kavousi, A., Meshkani, M. R. and **Mohammadzadeh, M.**, (2011), Spatial Analysis of Auto-Multivariate Lattice Data, *Statistical Papers*, **52**, 937-952.

48-Karimi, O. and **Mohammadzadeh, M.**, (2011), Bayesian Spatial Prediction for Discrete Closed Skew Gaussian Random Field, *Mathematical Geosciences*, **43**, No. 5, 565-582.

49-Iranpanah, N., **Mohammadzadeh, M.**, and Taylor, C. C., (2011), A Comparison of Block and Semi-Parametric Bootstrap Methods for Variance Estimation in Spatial Statistics, *Computational Statistics and Data Analysis*, **55**, 578-587.

50-Massah, A., Morid, S., **Mohammadzadeh, M.**, (2011), Evaluating Different AOGCMs and Downscaling Procedures in Climate Change Local Impact Assessment Studies, *Journal of the Earth and Space Physics*, **36**, 91-110.

51-Baghishani, H. and **Mohammadzadeh, M.**, (2011), A Data Cloning Algorithm for Computing Maximum Likelihood Estimates in Spatial Generalized Linear Mixed Models, *Computational Statistics and Data Analysis*, **55**, 1748-1759.

52-Hosseini, F., Eidsvik, J. and **Mohammadzadeh, M.**, (2011), Approximate Bayesian Inference in Spatial GLMM with Skew Normal Latent Variables, *Computational Statistics and Data Analysis*, **55**, 1791-1806.

53-Rivaz, F., **Mohammadzadeh, M.** and Khaderi, J. M., (2011), Spatio-temporal Modeling and Prediction of CO Concentrations in Tehran City, *Journal of Applied Statistics*, **38**, No. 9, 1995-2007.

54-Kent, J. T., **Mohammadzadeh, M.** and Mohammadian, M. A., (2011), The Dimple in Gneiting's Spatial-Temporal Covariance Model, *Biometrika*, **98**, No. 2, 489-494.

55-**Mohammadzadeh, M.**, and Hosseini, H. (2011), Maximum Likelihood Estimation for Spatial GLM Models with Closed-Skew Normal Latent Variables, *Procedia Environmental Sciences*, **3**, 63-68.

56-Behshad, E., and **Mohammadzadeh, M.**, (2011), Evaluation of Tests for Separability and Symmetry of Spatio-temporal Covariance Function, *Journal of Statistical Research of Iran*, **8**, 1-26.

57-Mousavi, S. S. and **Mohammadzadeh, M.**, (2011), Spatial-Temporal Trend Modeling for Ozone Concentration in Tehran City, *Journal of Statistical Research of Iran*, **8**, 149-163.

58-Baghishani, H., Rue, H. and **Mohammadzadeh, M.**, (2012), On a Hybrid Data Cloning Method and Its Application in Generalized Linear Mixed Models, *Statistics and Computing*, **22**, 597-613.

59-Azizi, A., Yazid B. A., Ping, L. W. and **Mohammadzadeh, M.**, (2011), A Bayesian Autoregressive Integrated Moving Average Model for Estimating the Production Throughput under Uncertain Conditions, *International Journal for Advances in Computer Science*, **4**, 5-10.

60-Karimi, O. and **Mohammadzadeh, M.**, (2012), Bayesian Spatial Regression Models with Closed Skew Normal Correlated Errors and Missing Observations, *Statistical Papers*, **53**, 205-218.

61-Baghishani, H. and **Mohammadzadeh, M.**, (2012), Asymptotic Normality of Posterior Distributions for Generalized Linear Mixed Model, *Journal of Multivariate Analysis*, **111**, 66–77.

62-Hosseini, F. and **Mohammadzadeh, M.**, (2012), Bayesian Prediction for Spatial Generalized Linear Mixed Models with Closed Skew Normal Latent Variables, *Australian & New Zealand Journal of Statistics*, **54**, 43–62.

63-Rezaeitabar, V., and **Mohammadzadeh, M.**, (2012), Spatial Logistic and Probit Regression Models for Analysis of Frosting Data in Mazandaran Province, *Journal of Mathematical Advance Modeling*, **1**, No. 2, 1-17.

64-Azizi, A., Ali, A. Y. B., Ping, L. W. and **Mohammadzadeh, M.**, (2012), A Hybrid Model of ARIMA and Multiple Polynomial Regression for Uncertainties Modeling of a Serial Production Line, *International Journal of Industrial and Manufacturing Engineering*, **6**, 87-92.

65-Azizi, A., Ali, A. Y. B., Ping, L. W. and **Mohammadzadeh, M.**, (2012), Estimating and Modeling Uncertainties Affecting Production Throughout of a Serial Production Using ARIMA Multiple Linear Regression, *Advanced Material Research*, **488**, 1263-1267.

66-Fallah, A. and **Mohammadzadeh, M.**, (2012), Bayesian and Iterative Maximum Likelihood Estimation of the Coefficients in Logistic Regression Analysis with Linked Data, *Journal of Statistical Research of Iran*, **9**, 43-60.

67-Hosseini, F. and **Mohammadzadeh, M.**, (2012), Estimation of Spatial Generalized Linear Mixed Models with Closed Skew Normal Latent Variables, *Journal of Science Kharazmi University*, **12**, 305-312.

68-Sadeghian, A., Waghei, Y. and **Mohammadzadeh, M.**, (2013), Spatial-temporal Prediction of Groundwater Table in Birjand Region by Kriging Method, *Journal of Water & Wastewater*, **24**, 94-100.

69-Mousavi, S. S. and **Mohammadzadeh, M.**, (2013), Determination of Spatial-Temporal Correlation Structure of Troposphere Ozone Data in Tehran City, *Journal of Sciences Islamic Republic of Iran*, **24**, 171-178.

70-Gholizadeh, K., **Mohammadzadeh, M.** and Ghayomi, Z., (2013), Spatial Analysis of Structured Additive Regression and Modeling of Crime Data in Tehran City using Integrated Nested Laplace Approximation, *Journal of Statistical Science*, **7**, 103-124.

71-Mohammadi, A. and **Mohammadzadeh, M.** (2013), Robust Spatial Data Analysis in the Presence of Outliers, *Journal of Advanced Mathematical Modeling*, **2**, 33-47.

72-Omidi, M. and **Mohammadzadeh, M.**, (2013), Determination of Structural Dependence of Spatial Data with Copula Functions, *Journal of Science Kharazmi University*, **13**, No. 3, 767-778.

73-Hosseini, F., Karimi, O. and Mohammadzadeh, M., (2013), Pseudo-likelihood Inference for Discrete Spatial Response (A Case Study of the Semnan Rainfall Data), *Journal of Science Kharazmi University*, **13**, No. 3, 797-808.

74-Ghayomi, Z., **Mohammadzadeh, M.**, and Gholizadeh, K. (2013), Spatial Latent Gaussian Models: Application to House Prices Data in Tehran City, *Journal of Statistical Research of Iran*, **10**, 124-141.

75-Mahmoudian, B., **Mohammadzadeh, M.** and Shahbazi, L., (2014), Bayesian Modeling and Prediction of Spatial Extreme Values with t Copula Function, *Journal of Science, Karazmi University*, **14**, No. 2, 127-140.

76-Mahmoudian, B. and **Mohammadzadeh, M.** (2014), A Spatio-Temporal Dynamic Regression Model for Extreme Wind Speeds, *Extremes*, **17**, 221-245.

77-Motarjem, K., **Mohammadzadeh, M.**, and Abyar, A. (2014), Cox and Frailty Models for Analysis of Spatial Survival Data, *Journal of Advanced Mathematical Modeling*, **4**(2), 101-116.

78-Moradkhani, A., Haghifam, M. R. and **Mohammadzadeh, M.** (2014), Bayesian Estimation of Overhead Lines Failure Rate in Electrical Distribution Systems, *International Journal of Electrical Power and Energy Systems*, **56**, 220-227.

79-Moradkhani, A., Haghifam, M. R. and **Mohammadzadeh, M.** (2014), Failure Rate Modeling of Electric Distribution Overhead Lines Considering Preventive Maintenance, *IET Generation, Transmission & Distribution Journal*, **8**, 1028 - 1038.

80-Moradkhani, A., Haghifam, M. R. and **Mohammadzadeh, M.** (2014), Failure Rate Estimation of Overhead Electric Distribution Lines Considering Data Deficiency and Population Variability, *International Transactions on Electrical Energy Systems*, **25**, 1452-1465.

81-Omidi, M. and **Mohammadzadeh, M.**, (2015), A New Method to Build Spatio-Temporal Covariance Functions: Analysis of Ozone Data, *Statistical Papers*, **57**(3), 689-703, DOI: 10.1007/s00362-015-0674-2.

82-Mahdianfar, N. and **Mohammadzadeh, M.**, (2015), Bayesian Melding for Combining Models Deterministic and Kriging Dependent Spatial Data Analysis, *Journal of Mathematical Researches (Journal of Science Kharazmi University)*, **1**(2), 85-98.

83-Azizi, A., Ali, A. Y. B., Ping, L. W. and **Mohammadzadeh, M.**, (2015), Production Uncertainties Modelling by Bayesian Inference Using Gibbs Sampling, *South African Journal of Industrial Engineering*, **26**, 27-40.

84-Motarjem, K., **Mohammadzadeh, M.**, and Abyar, A. (2016), Spatial Modeling of Censored Survival Data, *Journal of Mathematical Researches (Journal of Science Kharazmi University)*, **1**(2), 65-74.

85-Jafari, F., Javadi, S., Golmohammadi, G., Mohammadi, K., Khodadadi, A. and **Mohammadzadeh, M.** (2016), Groundwater Risk Mapping Prediction Using Mathematical Modeling and the Monte Carlo Technique, *Environmental Earth Sciences*, **75**(6). DOI: 10.1007/s12665-016-5335-9.

86-Naseri, Z. and **Mohammadzadeh, M.** (2016), Small Area Estimation and Spatial Prediction, *Journal of Advanced Mathematical Modeling*, **6**(1), 23-38.

87-Abyar, A., **Mohammadzadeh, M.** and Motarjem, K. (2016), Cox and Frailty Models for Analysis of Esophageal Cancer Data, *Andishe-ye-Amari*, **21**(1), 57-64.

88-Shojaei, S. R., Waghei, Y. and **Mohammadzadeh, M.** (2016), A Simulation Comparison on Spatial Poisson Mixed Models, *Communications in Statistics - Simulation and Computation*, **64**(8), 6208-6220, DOI:10.1080/03610918.2016.1202268.

89-Kalhori, L., and **Mohammadzadeh, M.** (2016), Spatial Beta Regression Model with Random Effect, *Journal of Statistical Research of Iran*, **13**(2), 215-230. DOI: 10.18869/acadpub.jsri.13.2.215.

90-Boroumandi, M., Khamehchiyan, M., Nikudel, M. R., and **Mohammadzadeh, M.** (2017), Evaluation and Determination of Soil Pollutants in Zanjan Basin Using Positive Matrix Factorization, *Journal of Environmental Sciences and Technology*, In Press, Available Online from 05 October 2016.

91-Sasani, S. and **Mohammadzadeh, M.** (2017), Spatial Correlation Testing for Errors in Panel Data Regression Model, *Journal of Mathematical Researches (Journal of Science Kharazmi University)*, **2**(2), 13-22.

92-Shojaei, S. R., Waghei, Y. and **Mohammadzadeh, M.** (2017): Geostatistical Analysis of Disease Data: A Case Study of Tuberculosis Incidence in Iran, *Journal of Applied Statistics*, **45**(8), 1476-1483, DOI: 10.1080/02664763.2017.1375468.

93-Fallah, Z. and **Mohammadzadeh, M.** (2017), Augmented Mixed Beta Regression and Modeling of Employed Proportions in Households, *Journal of Advanced Mathematical Modeling*, **7**, 19-35.

94-Fallah, Z., **Mohammadzadeh, M.** and Baghfalaki, T. (2017), Bayesian Analysis of Augmented Mixed Beta Models with Skew-Normal Random Effects, *Journal of Statistical Research of Iran*, **14**, 101-118.

95-Shojaei, S. R., Waghei, Y. and **Mohammadzadeh, M.** (2017): Parameter Estimation in Spatial Generalized Linear Mixed Models with Skew Gaussian Random Effects using Laplace Approximation, *Journal of Statistical Research of Iran*, **14**, 157-169.

96-Khavarzadeh, R., **Mohammadzadeh, M.** and Mateu, J. (2018), A Simple Two-step Method for Spatio-temporal Design-based Balanced Sampling, *Stochastic Environmental Research and Risk Assessment*, **32**, 457-468, DOI:10.1007/s00477-017-1409-9.

97-Kalhori, L. N., **Mohammadzadeh, M.** (2018), Bayesian Inference for Spatial Beta Generalized Linear Mixed Models, *Journal of Sciences I.R.I*, **29**, 173-185.

98-Khavarzadeh, R. and **Mohammadzadeh, M.** (2018), Two-Step Spatial Balanced Sampling for Random Fields Prediction, *Journal of Advanced Mathematical Modeling*, **8**, 1-14.

99- Saber, M. M., Nemattollahi, A. R. and **Mohammadzadeh, M.** (2018), Generalized Asymmetric Laplace Random Fields: Existence and Application, *Journal of Data Science*, **16**, 51-68.

100- Omidi, M. and **Mohammadzadeh, M.** (2018), Spatial Interpolation Using Copula for Non-Gaussian Modeling of Rainfall Data, *Journal of The Iranian Statistical Society*, **17**, 165-179, [DOI: 10.29252/jirss.17.2.8](https://doi.org/10.29252/jirss.17.2.8).

101- Ayyad, C., Mateu, J., Omidi, M., Tamayo Uria, I., and **Mohammadzadeh M.** (2019), Trivariate Non-Gaussian Copulas to Analyze the Spatial Behavior of Rat Sightings, *Statistica Neerlandica*, **73**(2), 256-273, DOI: doi.org/10.1111/stan.12168.

102- Fallah, Z. and **Mohammadzadeh, M.** Baghfalaki, T. (2019), Augmented Mixed Beta Regression Models with Skew-Normal Independent Distributions: Bayesian Analysis of Labor Force Data, *Communications in Statistics-Simulation and Computation*, **48**(7), 2147-2164.

103- Motarjem, K., **Mohammadzadeh, M.**, and Abyar, A. (2019), Bayesian Analysis of Spatial Survival Model with Non-Gaussian Random Effect, *Journal of Mathematical Sciences*, **237**(5), 692-701, [DOI: 10.1007/s10958-019-04195-z](https://doi.org/10.1007/s10958-019-04195-z).

104- Bromandi, M., Khamehchian, M., Nikodel, M. R. and **Mohammadzadeh, M.** (2019), Evaluation of Soil Pollution Sources Using Multivariate Analysis Combined with Geostatistical Methods in Zanjan Basin, Iran, *Geopersia*, **9**(2), 293-304. [DOI: 10.22059/GEOPE.2019.263512.648406](https://doi.org/10.22059/GEOPE.2019.263512.648406).

105- Bromandi, M., Khamehchian, M., Nikodel, M. R. and **Mohammadzadeh, M.** (2019), Evaluation of Heavy Metal Pollution in Surface Soils in Zanjan Province, Iran, *International Journal of Ecosystems and Ecology Science*, **9**(1), 173-182. [DOI: doi.org/10.31407/ijees91](https://doi.org/10.31407/ijees91).

106- Zahmatkes, S. and **Mohammadzadeh, M.** (2019), Modeling of Spatio-Temporal Data with Non-Ignorable Missing, *Journal of Advanced Mathematical Modeling (JAMM)*, **10**(1), 39-61. DIO: [10.22055/jamm.2020.28698.1692](https://doi.org/10.22055/jamm.2020.28698.1692).

107- [Motarjem, K.](#), **Mohammadzadeh, M.**, and Abyar, A. (2020), Geostatistical Survival Model with Gaussian Random Effect, *Statistical Papers*, **21**(1), 85-107. DOI: 10.1007/s00362-017-0922-8.

108- Zahmatkesh, S. and **Mohammadzadeh, M.** (2021), Bayesian Prediction of Spatial Data with Non-Ignorable Missingness, *Statistical Papers*, **62**, 2247-2268. [DOI:10.1007/s00362-020-01186-0](https://doi.org/10.1007/s00362-020-01186-0).

109- Kazemi, K. and **Mohammadzadeh, M.** (2021), Spatial Varying Coefficient Regression Model For Relative Risk Factors of Esophageal Cancer Patients, *Andish-ey Amari*, **25**(2), 103-112.

110- Saber, M. M., Nematollahi, A. and **Mohammadzadeh, M.** (2021), Generalized Skew Laplace Random Fields: Bayesian Spatial Prediction for Skew and Heavy-Tailed Data, *Journal of Statistical Theory and Applications*, **20**(1), 76-85. DOI: [doi.org/10.2991/jsta.d.210111.001](https://doi.org/10.2991/jsta.d.210111.001).

111- Farzammehr, M. A., **Mohammadzadeh, M.**, Zadkarami, M. R. and McLachlan, G. J. (2021), Bayesian Analysis of Generalized Linear Mixed Models with Spatial Correlated and Unrestricted Skew Normal Errors, *Communications in Statistics - Theory and Methods*, DOI: [10.1080/03610926.2021.1897843](https://doi.org/10.1080/03610926.2021.1897843).

112- Saber, M. M., Nematollahi, A. and **Mohammadzadeh, M.** (2021), Extended Generalized Skew Laplace Random Field: Spatial Autoregressive and Moving Average Model for Prediction of Missing Data in Skew and Heavy-Tailed Data, *Journal of Sciences, Islamic Republic of Iran*, **32**(2), 169-178, DOI: [10.22059/jsciences.2021.315726.1007606](https://doi.org/10.22059/jsciences.2021.315726.1007606).

113- [Saadati, S.](#) and **Mohammadzadeh, M.** (2021), Spatio-Temporal Prediction of a Nonstationary and Non-separable Random Fields with Tucker Decomposition of Covariance Tensor, *Journal of Advanced Mathematical Modeling*, **11**(3), 433-445. [DOI: 10.22055/jamm.2021.35337.1863](https://doi.org/10.22055/jamm.2021.35337.1863).

114- Zahmatkes, S. and **Mohammadzadeh, M.** (2021), Modeling and Analyzing Missing Spatial Data by Spatial Autoregressive Models and Vectorized Maximum Likelihood Method, *Journal of Mathematical Researches*, **7**(2), 756-772.

115- Moghadam, M. and **Mohammadzadeh, M.** (2022), Nonparametric Estimation of Spatial Risk for a Mean Nonstationary Random Field, *Journal of Mathematical Researches*, **8**(2), 1-24.

116- Gholizadeh, K. and **Mohammadzadeh, M.** (2022), An Approximate Bayesian Inference for Beta Regression Models, *Journal of Sciences, Islamic Republic of Iran*, **33**(2), 139–148, DOI: [10.22059/jsciences.2022.328984.1007665](https://doi.org/10.22059/jsciences.2022.328984.1007665).

117- Asadian, M., Hojjati, M., **Mohammadzadeh, M.** and Nadi, M. (2022), The Changes of Soil Carbon, Nitrogen and Soil Aggregate Stability Affected by Different Land Uses, *Forest Research and Development*, **8**(2), 133-146. DOI: [10.30466/JFRD.2021.53919.1577](https://doi.org/10.30466/JFRD.2021.53919.1577).

118- Nahardani, Z. and M., Mohammadzadeh, M. (2022), Modeling of Correlation Structure For Bayesian Analysis of Spatial Survival Data: Estimating the Relative Risk of Prostate Cancer Patients, *Journal of Advanced Mathematical Modeling*, **12**(3), 414-427. DOI: [10.22055/JAMM.2022.39717.1998](https://doi.org/10.22055/JAMM.2022.39717.1998)

119- Asadian, M., Hojjati, M., **Mohammadzadeh, M.** and Nadi, M. (2023), Evaluating the Response of Ecosystems to Land-use Change Using Soil Quality Index-Alandan Forest Sari, *Iranian Journal of Forest*, **15**(1), 17-34. DOI: [10.22034/ijf.2022.341214.1868](https://doi.org/10.22034/ijf.2022.341214.1868).

120- Lotfian, E. and M., Mohammadzadeh, M. (2023), Multi-objective Optimization of Spatial Sampling Using a New Hybrid AMOSA\_NSGA-II Algorithm, *Computational and Applied Mathematics*, **42**(1), 1-40. DOI: [10.1007/s40314-022-02161-1](https://doi.org/10.1007/s40314-022-02161-1)

121- Lashgari, S., M., Mohammadzadeh, M. and Ghaderi, F. (2023), Adaptive Elastic-net Sliced Inverse Regression to Identify Risk Factors Affecting Covid-19 Disease Fatality Rate, *IET Signal Processing*, **17**(4), 1-14. DOI: [10.1049/sil2.12200](https://doi.org/10.1049/sil2.12200).

122- Ebrahimi, N. and **Mohammadzadeh, M.** Cortese, G. (2023), Copula Functions For Spatial Survival Data Analysis, *Journal of Sciences, Islamic Republic of Iran*, DOI: [10.22059/jsciences.2023.350366.1007763](https://doi.org/10.22059/jsciences.2023.350366.1007763).

123- Saber M M, **Mohammadzadeh M.** (2024), Autoregressive Spatial Regression Model and Second-Order Moving Average for Generalized Skew-Laplace Random Field, *Journal of Statistica Sciences (JSS)*, **18**(2), 299-314.

124- Poursaeed, R., **Mohammadzadeh, M.** and Safaei, A. (2024), Survival Prediction of Glioblastoma Patients Using Machine Learning and Deep Learning: A Systematic Review, *BMC Cancer*, **24**, 1581, 1-36. DOI: [10.1186/s12885-024-13320-4](https://doi.org/10.1186/s12885-024-13320-4).

125- Salehi, L. and **Mohammadzadeh, M.** (2024), Penalized Composite Likelihood Estimation for Spatial Generalized Linear Mixed Models, *Journal of Sciences, Islamic Republic of Iran*, **35**(2), 135-145. <https://doi.org/10.22059/jsciences.2025.383849.1007889>

126- Asadi, S. and **Mohammadzadeh, M.** (2024), Bayesian Clustering of Spatially Varying Coefficients Zero-Inflated Survival Regression Models, *Journal of Sciences, Islamic Republic of Iran*, **35**(3), 205-219.  
<https://doi.org/10.22059/jsciences.2024.383129.1007886>

127- Asadi, S. and **Mohammadzadeh, M.** (2025), Bayesian Analysis of Spatial Zero-Inflated and Right-censored Survival Data, *Journal of Agricultural, Biological, and Environmental Statistics*, **30**(1), <https://link.springer.com/article/10.1007/s13253-025-00682-w>

128- Lotfian, E. and M., Mohammadzadeh, M. (2025), Multi-Objective Optimal Spatial Sampling Design, Submitted.

### **List of Published Papers in Conference Proceedings:**

- 1- **Mohammadzadeh, M.**, (1987), Asymptotic Distribution of Empirical Bayes Estimator of the Parameter of Exponential Family, *Proceedings of the 18th Iranian Mathematical Conference*, Birjand, Iran.
- 2- **Mohammadzadeh, M.**, (1997), Spectral Approximation to the Likelihood for a Random Field Generated by a CAR Model, *Proceedings of the First Iranian Seminar on Probability and Stochastic Processes*, Shahrekord, Iran, 82-95.
- 3- **Mohammadzadeh, M.**, (1998), Estimating the Smoothing Parameter in Smoothing Splines, *Proceedings of the Thirteen Symposium on Computational Statistics, COMPSTAT'98*, Bristol, England.
- 4- **Mohammadzadeh, M.**, (1998), An Algorithm to Find the Smoothing Parameter in Smoothing Splines, *Proceedings of the Fourth Iranian International Statistics Conference*, Tehran, Iran.
- 5- **Mohammadzadeh, M.**, Alimohammadi, R., (1999), Comparison of Smoothing Spline with Polynomial Regression, *Proceedings of the 30th Iranian International Conference on Mathematics*, Ardabil, Iran, (in Persian).
- 6- **Mohammadzadeh, M.**, and Kavousi, A. (1999), Kriging Method in Spatial Statistics, *Proceedings of the Second Iranian Seminar on Probability and Stochastic Processes*, Tafresh, Iran, 69-78.
- 7- **Mohammadzadeh, M.**, and Rashid Benam, A. (2000), Bayesian Estimation for Contaminated Data, *Proceedings of the Fifth Iranian Statistical Conference*, Isfahan University of Technology, Isfahan, Iran.
- 8- **Mohammadzadeh, M.**, (2000), Empirical Bayes Estimation for Contaminated Data, *Proceedings of the Fourteen COMPSTAT Conference of the International Association for Statistical Computing, COMPSTAT 2000*, Utrecht, the Netherlands.
- 9- **Mohammadzadeh, M.**, and Mohammadian, M. A., (2000), Application of Sparse Matrices in Spatial Data Analysis, *Proceedings of the 2nd Iranian International Conference on Applied Mathematics*, University of Science and Technology, Tehran, Iran, 496-502, (in Persian).
- 10- **Mohammadzadeh, M.**, (2000), Algorithm of Spatial Data Ordering for Multiple Outlier Detection, *Proceedings of the First International Conference on Graphs, Combinatorics, Computational Algorithms and their Applications*, Amirkabir University of Technology, Tehran, Iran, (in Persian).
- 11- **Mohammadzadeh, M.** and Safari, R., (2000), Comparison of Spatial Interpolations, *Proceedings of the First International Conference on Graphs, Combinatorics, Computational Algorithms and their Applications*, Amirkabir University of Technology, Tehran, Iran, (in Persian).

12-**Mohammadzadeh, M.** and Alimohammadi, R., (2001), Statistical Modeling for Binary Spatial Data, *Proceedings of the 3rd Iranian Seminar on Probability and Stochastic Processes*, University of Isfahan - Khansar, 213-219, (in Persian).

13-**Mohammadzadeh, M.** and Ghorbani, M., (2001), Composite Likelihood Estimation of Variogram Parameters, *Proceedings of the 3rd Iranian Seminar on Probability and Stochastic Processes*, University of Isfahan - Khansar, 220-231,(in Persian).

14-**Mohammadzadeh, M.**, (2002), An Empirical Bayes Estimator for Weibull Distribution, *Proceedings of the Sixth International Statistics Conference*, Tehran, Vol. 1,130-134.

15-**Mohammadzadeh, M.** and Salehi, R., (2002), Windows Parameter in Density Estimation with B-Spline, *Proceedings of the Sixth International Statistics Conference*, Tehran, Vol. 2, 335-344.

16-**Mohammadzadeh, M.**, Kazemnejad, A., Faghihzadeh, S. and Waghei, Y., (2002), Universal Kriging in Geographical Epidemiology of Diseases, *Proceedings of the Sixth International Statistics Conference*, Tehran, Vol. 2, 345-359.

17-**Mohammadzadeh, M.** and Mohammadian, M., (2002), Detection of Spatial Outlier Data, *Proceedings of the Sixth International Statistics Conference*, Tehran, Vol. 1, 360-370.

18-Pasha, E., **Mohammadzadeh, M.** and Aghamohammadi, E., (2002), Maximum Entropy Approach in Estimation of Regression Parameters, *Proceedings of the Sixth International Statistics Conference*, Tehran, Vol. 1, 99-109.

19-Vahidi-Asl, M. Q., **Mohammadzadeh, M.** and, (2002), Model Selection for Probabilistic Clustering Using BIC Criterion, *Proceedings of the Ghorbani, M. Sixth International Statistics Conference*, Tehran, Vol. 1, 455-465.

20-Vahidi-Asl, M. Q., **Mohammadzadeh, M.** and Goodarzi, F., (2002), Application of Random Interval Graphs in Cluster Analysis, *Proceedings of the Sixth International Statistics Conference*, Tehran, Vol. 1, 466-483.

21-**Mohammadzadeh, M.** and Jafari, K. M. (2003), Bayesian Spatial Prediction for Gaussian Random Fields, *Proceedings of the 4th Iranian Seminar on Probability and Stochastic Processes*, University of Gorgan, (in Persian).

22-**Mohammadzadeh, M.** and Waghei, Y. (2003), Detection of Outlier Observations of a Random Field, *Proceedings of the 4th Iranian Seminar on Probability and Stochastic Processes*, University of Gorgan, (in Persian).

23-**Mohammadzadeh, M.**, and Khaledi, M. J., (2004), Bayesian Prediction for a Noisy Log-Gaussian Spatial Model, COMPSTAT: *Proceedings in Computational Statistics*, Prague, Czech Republic. 1511-1518, Edited by Jaromir Antoch, Physica-Verlag Heidelberg.

24-Iranpanah, N. and **Mohammadzadeh, M.** (2004), Bootstrap Algorithms in Spatial Statistics, *Proceedings of the 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Iran, 199-121.

25-Hosseini, F. and **Mohammadzadeh, M.** (2004), Spatial Prediction by Trans Gaussian Kriging Method, *Proceedings of the 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Iran, 393-399.

26-Fallah, A. and **Mohammadzadeh, M.** (2004), Bayesian Averaging for Regression Models, *Proceedings of the 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Iran, 646-655.

27-Rivaz, F. and **Mohammadzadeh, M.** (2004), Comparison of three Optimal Spatial Design, *Proceedings of the 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Tehran.

28-Salehi, R. and **Mohammadzadeh, M.** (2004), Using Penalized Spline Regression for Smoothing, *Proceedings of the 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Tehran.

29-Ghorbani, M. and **Mohammadzadeh, M.** (2004), Determination of Clustering Numbers in Mixture Analysis with Normalized Entropy, *Proceedings of the 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Iran, 676-684.

30-**Mohammadzadeh, M.**, and Khaledi, M. J., (2004), Bayesian Spatial Prediction with Monte Carlo Methods, *Proceedings of the 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Iran, 708-714.

31-**Mohammadzadeh, M.**, and Zargar, M., (2004), Bayesian Prediction of Pareto Life Time Model with Random Sample Size, *Proceedings of the 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Iran, 715-730.

32-**Mohammadzadeh, M.**, and Khaledi, M. J., (2005), Empirical Bayes Spatial Prediction for Rainfall Data, *Proceedings of the International Association for Mathematical Geology*, Toronto University, Canada, 698-703.

33-**Mohammadzadeh, M.**, Hosseini, F. and Karimi, O., (2005), Smoothing Random Fields in Spatial Statistics, *Proceedings of the 5th Seminar on Probability and Stochastic Processes*, Birjand, Iran, 260-268.

34-**Mohammadzadeh, M.**, Moradi, S., (2005), A Test for Stationarity and Isotropy of Random Fields in Spatial Statistics, *Proceedings of the 5th Seminar on Probability and Stochastic Processes*, Birjand, Iran, 279-289.

35-Pasha, E., **Mohammadzadeh, M.**, and Mansouri, S., (2005), Determination of Bivariate Probability Distribution under some Constraints Using Maximum Entropy, *Proceedings of the 5th Seminar on Probability and Stochastic Processes*, Birjand, Iran, 290-296.

36-**Mohammadzadeh, M.**, Khaledi, M. J. and Rivaz, F. (2006), Bayesian Spatial Prediction by Model Averaging, *Proceedings of the ISBA 8th Word Meeting on Bayesian Statistics*, Benidorm, Spain.

37-Rivaz, F., **Mohammadzadeh, M.**, and Khaledi, M. J., (2006), Space-Time Bayesian Prediction for Separable Random Fields, *Proceedings of the 8th Iranian Statistical Conference*, Shiraz University, Iran, 42-51.

38-Massah, A., Morid, S., **Mohammadzadeh, M.**, and Clare, G., (2007), Future Climate of Zayandeh Rud Basin Under Climate Change; An Intercomparison Between Different AOGCM', *Proceedings of the 2nd Iranian Water Resources Management*, Industrial Isfahan University, Iran.

39-Massah, A., Morid, S., **Mohammadzadeh, M.**, and Clare, G., (2007), The Effect of Uncertainty on Probability Distribution Function of Runoff under Climate Change,

*Proceedings of the 2nd Iranian Water Resources Management*, Industrial Isfahan University, Iran.

40-**Mohammadzadeh, M.**, and Iranpanah, N., (2007), Separate Block Bootstrap Method for Determining the Precision Measures of the Variogram Parameters Estimator, *Proceedings of the 56th Session of the ISI*, Lisbon, Portugal.

41-**Mohammadzadeh, M.**, and Karimi, O., (2007), Bayesian Spatial Prediction for Closed Skew Gaussian Random Field, *Proceedings of the Geomathematics and GIS Analysis of Resources, Environment and Hazards*, Beijing, China, 684-687.

42-Hooman, A. and **Mohammadzadeh, M.**, (2007), Predicting the Type of Pregnancy Using Flexible Discriminate Analysis and Artificial Neural Networks: A Comparison Study, *Proceedings of the International Conference on Mathematical Biology* (ICMB07), Kuala Lumpur, Malaysia.

43-Hosseini, F. and **Mohammadzadeh, M.**, (2008), Prediction of Skewed Gaussian Random Effects in Spatial Generalized Linear Mixed Models, *Proceedings of the 9th Iranian Statistical Conference*, Isfahan.

44-Kavousi, A., Meshkani, M. R. and **Mohammadzadeh, M.**, (2008), Spatial Analysis of Lip and Mouth Cancer in Iran, *Proceedings of the 9th Iranian Statistical Conference*, Isfahan.

45-**Mohammadzadeh, M.** and Karimi, O. (2008), Some Problems in Bayesian Prediction of Non-Gaussian Spatial Data, *Proceedings of the 9th Iranian Statistical Conference*, Isfahan.

46-Karimi, O., Omre, H. and **Mohammadzadeh, M.**, (2009), Bayesian Closed Skew Gaussian Inversion of Seismic AVO Data into Elastic Material Properties, *Proceedings of the 71st EAGE Conference & Exhibition*, Amsterdam, Netherlands.

47-Baghishani, H., and **Mohammadzadeh, M.**, (2009), Asymptotic Properties of Data Cloning Based Estimators, *Proceedings of the 7th Seminar on Probability and Stochastic Processes*, Isfahan, Iran.

48-Rivaz, F., **Mohammadzadeh, M.**, and Khaledi, M. J., (2009), Bayesian Prediction for Spatio-temporal Gaussian Random Fields, *Proceedings of the 7th Seminar on Probability and Stochastic Processes*, Isfahan, Iran.

49-Hosseini, F., and **Mohammadzadeh, M.**, (2010), Bayesian Analysis of Spatial GLMM with Skew Normal Latent Variables, *Proceedings of the IAMG2010*, Budapest, Hungary.

50-Iranpanah, N. and **Mohammadzadeh, M.** (2010), Separate Block Bootstrap Method for Determining the Precision Measures for Spatial Prediction, *Proceedings of the 10th Statistical Conference*, Tabriz, Iran, 68-77.

51-Keradmandi, F., **Mohammadzadeh, M.**, and Sanjari, F. N. (2010), Properties of Skew t Normal Distribution and Modeling of the Contaminating Data in Shadgan Wetland, *Proceedings of the 10th Statistical Conference*, Tabriz, Iran, 164-174.

52-Mahmoudian, B., **Mohammadzadeh, M.**, and Golalizadeh, M. (2010), Bayesian Analysis of Extreme Values with Splines and Generalized Linear Mixture Models, *Proceedings of the 10th Statistical Conference*, Tabriz, Iran, 463-473.

53-Karimi, O., Hosseini, F., and **Mohammadzadeh, M.**, (2011), Pairwise Likelihood in Spatial GLMM with Skew Normal Latent Variables, *Proceedings of the IAMG2011*, Salzburg, Austria.

54-**Mohammadzadeh, M.**, Mohammadzadeh, M. and Westland, S. (2011), The Significance Testing of a Skewed Color-Imaging Data Set, *Proceedings of the 19th Annual Color Imaging Conference*, California, USA.

55-Baghishani, H., and **Mohammadzadeh, M.**, (2012), On Likelihood-based Inferences in Spatial Models with Discrete Responses: Data Cloning Approach, *Proceedings of the 2nd Workshop on Spatial Statistics and Applications*, Mashhad, Iran.

56-Gayyomi, Z., Gholizadeh, K., and **Mohammadzadeh, M.**, (2012), Analysis of the Spatial Latent Gaussian Models Using Integrated Nested Laplace Approximation, *Proceedings of the 2nd Workshop on Spatial Statistics and Applications*, Mashhad, Iran.

57-Hosseini, F., and **Mohammadzadeh, M.**, (2012), Spatial Generalized Linear Mixed Models with Closed-Skew Latent Variables, *Proceedings of the 2nd Workshop on Spatial Statistics and Applications*, Mashhad, Iran.

58-Karimi, O., and **Mohammadzadeh, M.**, (2012), Bayesian Analysis of Spatial Data by Closed Skew Normal Distribution, *Proceedings of the 2nd Workshop on Spatial Statistics and Applications*, Mashhad, Iran.

59-Mohammadi, A., and **Mohammadzadeh, M.**, (2012), Robust Methods in Spatial Data Analysis, *Proceedings of the 2nd Workshop on Spatial Statistics and Applications*, Mashhad, Iran.

60-Mahmoudian, B., and **Mohammadzadeh, M.**, (2012), Bayesian Analysis of Spatial Extreme values, *Proceedings of the 2nd Workshop on Spatial Statistics and Applications*, Mashhad, Iran.

61-Rasouli, H. R., and **Mohammadzadeh, M.**, (2012), Bayesian Analysis of the Spatial Probit Models for Binary Response Variables, *Proceedings of the 2nd Workshop on Spatial Statistics and Applications*, Mashhad, Iran.

62-Ghayoumi, Z, Gholizadeh, K. and **Mohammadzadeh, M.**, (2012), Analysis of Spatial Latent Gaussian Models with Integrated Nested Laplace Approximation, *Proceedings of the 2nd Workshop on Spatial Statistics and Applications*, Mashhad, Iran.

63-Kavousi, A., Meshkani, M. R., **Mohammadzadeh, M.**, and Fallah, A. (2012), Generalizing the Auto-Binomial Model for Analysis of Multivariate Spatial Lattice Data, *Proceedings of the 2nd Workshop on Spatial Statistics and Applications*, Mashhad, Iran.

64-Hosseini, F., Karimi, O., and **Mohammadzadeh, M.** (2012), Asymptotic Likelihood Inference Spatial in Generalized Linear Mixed Models, *Proceedings of the 1st Statistical Conference*, Tehran, Iran, 143-150.

65-Rasouli, H., and **Mohammadzadeh, M.** (2012), Spatial Autoregressive Models for Analysis of Residential Deals Data in Tehran City, *Proceedings of the Statistical Conference*, Tehran, Iran, 204-212.

66-Shahbazi, L., **Mohammadzadeh, M.**, and Mahmoudian, B.(2012), Modeling of Spatial Extreme Values with Gaussian Copula Function, *Proceedings of the 11th Statistical Conference*, Tehran, Iran, 294-304.

67-Ghayyomi, M., Gholizadeh, K. and **Mohammadzadeh, M.**, (2013), Analysis of Spatial Semi-parametric Regression Model under Gaussian Markov Random field with Integrated Nested Laplace Approximation, *Proceedings of the 9th Seminar on Probability and Stochastic Processes*, 11-12 September, Zahedan, Iran.

68-Moradkhani, A., Haghifam, M. R., **Mohammadzadeh, M.** and Moghimi, M. Sadeghi, S. E. (2012), Estimation Overhead Lines Failure Rate Based On Hierarchical Bayesian Poisson Regression, *Proceedings of the 27th International Power System Conference*, 12-14 November 2012, Tehran, Iran.

69-Moradkhani, A., Haghifam, M. R., **Mohammadzadeh, M.** and Moghimi, M. Sadeghi, S. E. (2012), Bayesian Estimation of Overhead Lines Failure Rate with Restricted Information, *Proceedings of the 7th Electric Power Distribution Conference*, 2-May 2012, Tehran, Iran.

70-Iranpanah, N. and **Mohammadzadeh, M.** (2014), Parametric Bootstrap Method in Spatial Statistics, *12th Iranian Statistical Conference*, Kermanshah, Iran.

71-Motarjem, K. and **Mohammadzadeh, M.** (2014), The Spatial Effect of Unknown Hazard Factors on Estimation of the Cox Model and its Comparison with Shared Frailty Model, *12th Iranian Statistical Conference*, Kermanshah, Iran.

72-**Mohammadzadeh, M.** Rasouli, H. (2014), Spatio-Temporal Prediction with Dynamic Spatial Panel Models and Bayesian Analysis of Air Pollution Data in Tehran City, *12th Iranian Statistical Conference*, Kermanshah, Iran.

73-Khavarzadeh, R. and **Mohammadzadeh, M.** (2014), Spatially Balanced Sampling Design for Prediction of Random Fields, *12th Iranian Statistical Conference*, Kermanshah, Iran.

74-Karami, H., **Mohammadzadeh, M.**, Rasouli, H. and Sasani, S. (2014), Spatial Panel Regression Model and Bayesian Analysis of Effects of Economical Indexes on Crimes in Iran, *12th Iranian Statistical Conference*, Kermanshah, Iran.

75-Omidi, M., Ayyad, C., Mateu, J., **Mohammadzadeh, M.** and Tamayo, I. (2014). Spatial Clustering Analysis using Copulas and Point Patterns, *Proceedings of the Seventh International Workshop on Spatio-Temporal Modelling (METMA7)*. ISSN 2037-7738.

76-Bidarbakht, H., **Mohammadzadeh, M.**, Mohammadi, A. and Morid, S. (2015), Optimal Spatial Sampling Design By Entropy Criteria, *The 2nd Workshop on Information Measures*, 28-29 January, Kerman, Iran.

77-**Mohammadzadeh, M.**, and Omidi, M. (2015), Construction A Family of Nonseparable Spatio-Temporal Covariance By Using Copula Functions, *The 3rd Workshop on Copulas and Various Types of Dependencies*, 25-26 February, Kerman, Iran.

78-**Mohammadzadeh, M.**, Motarjem, K. and Abyar, A. (2015), Survival Modeling of Spatially Correlated Data, *Proceedings of the First Seminar on Reliability Theory and its Applications*, May 27-28, 2015, Isfahan, Iran.

79-**Mohammadzadeh, M.**, Omidi, M. and Mateu, J. (2015), A New Family of Spatio-temporal Covariance Functions with no Dimple, *Proceedings of the 17th Annual Conference of the International Association for Mathematical Geosciences, IAMG2015*, September 5-13, 2015, Freiberg, Germany.

80-Motarjem, K., **Mohammadzadeh, M.**, and Abyar, A. (2015), A Simulation Method for Generating Spatial Survival Data, *Proceedings of the Eighth International Workshop on Simulation*, September 21-25, 2015, Vienna, Austria.

81-Motarjem, K., **Mohammadzadeh, M.**, and Abyar, A. (2016), Bayesian Analysis of Spatial Survival Model with Non-Gaussian Random Effect, *Proceedings of the Eighth International Workshop on Simulation*, September 5-8 July 2016, Lisbon–Portugal, 44-48.

82-**Mohammadzadeh, M.**, Omidi, M. Mateu, J. (2016), Composite Likelihood and Bees Algorithm for Estimation of Spatio-Temporal Covariance Function, *Proceedings of the 13th Iranian Statistical Conference*, Kerman, Iran.

83-Omidi, M., and **Mohammadzadeh, M.** (2016), Using Copulas to Model the Spatial Point Pattern Data, *Proceedings of the 13th Iranian Statistical Conference*, Kerman, Iran.

84-Islami, M. and **Mohammadzadeh, M.** (2016), Flexible Spatial-Temporal Modeling with Smooth Temporal Basic Functions and Imputation of Missing Values, *Proceedings of the 13th Iranian Statistical Conference*, Kerman, Iran.

85-Abyar, A., **Mohammadzadeh, M.**, and Motarjem, K. (2016), Survival Analysis and Modeling of the Expected Publication Time of Scientific Papers, *Proceedings of the 13th Iranian Statistical Conference*, Kerman, Iran.

86-Khavrzhad, R. and **Mohammadzadeh, M.** (2016), Two-Step Balanced Spatial Sampling Plan for Prediction, *Proceedings of the 13th Iranian Statistical Conference*, Kerman, Iran.

87-Sassanid, S. and **Mohammadzadeh, M.** (2016), Testing of Spatial Correlation for Panel Regression Models, *Proceedings of the 13th Iranian Statistical Conference*, Kerman, Iran.

88-Falah, Z. and **Mohammadzadeh, M.** (2016), Bayesian Estimation of Beta Regression Model and Modeling of Migration Rates in Iranian Provinces, *Proceedings of the 13th Iranian Statistical Conference*, Kerman, Iran.

89-Kalhori, L. and **Mohammadzadeh, M.** (2016), Spatial Beta Regression Model and Modeling of Divorce Rates in Iranian Provinces, *Proceedings of the 13th Iranian Statistical Conference*, Kerman, Iran.

90-Motarjem, K., **Mohammadzadeh, M.**, and Abyar, A. (2016), Bayesian Analysis of Survival Models with Spatial Random Effects, *Proceedings of the 13th Iranian Statistical Conference*, Kerman, Iran.

91-Abyar, A., **Mohammadzadeh, M.**, and Motarjem, K. (2017), Clustering of High Dimensional Spatial Data, *2nd Seminar on Spatial Statistics and Its Applications*, 25-26 October 2017, Shahrood, Iran.

92-Ebrahimi, N. and **Mohammadzadeh, M.** (2017), Semiparametric Modeling of Spatially Correlated Survival Data with Copula Functions, *2nd Seminar on Spatial Statistics and Its Applications*, 25-26 October 2017, Shahrood, Iran.

93-Esmati, M. and **Mohammadzadeh, M.** (2017), Tensor Decomposition of Spatio-Temporal Random Field Covariance Function, *2nd Seminar on Spatial Statistics and Its Applications*, 25-26 October 2017, Shahrood, Iran.

94-Fathkhani, A. and **Mohammadzadeh, M.** (2017), Beta-Binomial Kriging for Modeling Spatial Proportions and Analysis of Divorce Proportions in Provinces of Iran, *2nd Seminar on Spatial Statistics and Its Applications*, 25-26 October 2017, Shahrood, Iran.

95-Golizadeh, K. and **Mohammadzadeh, M.** (2017), Modeling of Crime Data with Spatial Beta Regression Using Integrated Nested Laplace Approximation, *2nd Seminar on Spatial Statistics and Its Applications*, 25-26 October 2017, Shahrood, Iran.

96-Kalhori, L. and **Mohammadzadeh, M.** (2017), Simultaneous Modeling of the Mean and Precision Parameters of Spatial Beta Generalized Linear Mixed Model, *2nd Seminar on Spatial Statistics and Its Applications*, 25-26 October 2017, Shahrood, Iran.

97-Mohammadi, A. and **Mohammadzadeh, M.** (2017), Robust Estimation and Prediction with Bounded Influence in Spatial Small Area Estimation, *2nd Seminar on Spatial Statistics and Its Applications*, 25-26 October 2017, Shahrood, Iran.

98-Motarjem, K. and **Mohammadzadeh, M.** Abyar, A. (2017), Spatial Survival Model with Closed Skew Gaussian Random Effects, *2nd Seminar on Spatial Statistics and Its Applications*, 25-26 October 2017, Shahrood, Iran.

99-Zahmatkesh, S. and **Mohammadzadeh, M.** (2017), Analysis of a Spatial Autoregressive Model in the Presence of Missing Data, *2nd Seminar on Spatial Statistics and Its Applications*, 25-26 October 2017, Shahrood, Iran.

100- Omidi, M., and **Mohammadzadeh, M.** (2017), Multivariate Count-distance Base Copulas For Analysis of Spatial Point Pattern Data, *2nd Seminar on Spatial Statistics and Its Applications*, 25-26 October 2017, Shahrood, Iran.

101- Khavarzadeh, R. and **Mohammadzadeh, M.** (2018), Approximate Variance of Horvitz Thompson with Spatial Balanced Sampling, *Proceedings of the 14th Iranian Statistical Conference*, Shahrood, Iran, 222-228.

102- Zahmatkesh, S. and **Mohammadzadeh, M.** (2018), Bayesian Analysis of Spatially Correlated Data with Non-Ignorable Missingness, *Proceedings of the 14th Iranian Statistical Conference*, Shahrood, Iran, 310-304.

103- Sadeghi, N. and **Mohammadzadeh, M.** (2018), Analysis of Households Incomes in Tehran Province with Spatial Autoregressive Models, *Proceedings of the 14th Iranian Statistical Conference*, Shahrood, Iran, 335-340.

104- Lottian, E. and **Mohammadzadeh, M.** (2018), Spatial Sampling by Using Robust Multi-Objective Optimization, *Proceedings of the 14th Iranian Statistical Conference*, Shahrood, Iran, 534-527.

105- **Mohammadzadeh, M.**, Motarjem, K. and Abyar, A. (2018), Modeling of Spatial Survival Data with Closed Skew Gaussian Random Effect, *Proceedings of the 14th Iranian Statistical Conference*, Shahrood, Iran, 588-598.

106- **Mohammadzadeh, M.**, Zahmatkesh, S. (2019), Bayesian Prediction of Spatial Data with Non-Ignorable Missingness, *Proceedings of the 3rd Seminar on Spatial Statistics and Its Applications*, Vol. 2, Zanjan, Iran, 88-108.

107- Motarjem, K. and **Mohammadzadeh, M.** (2019), On Spatial Skew-Gaussian Process and Its Applications in Survival Analysis, *Proceedings of the 3rd Seminar on Spatial Statistics and Its Applications*, Vol. 2, Zanjan, Iran, 109-119.

108- Ebrahimi, N. and **Mohammadzadeh, M.** (2019), Modeling of Spatial Survival Data with Bivariate Clayton Copula Function, *Proceedings of the 3rd Seminar on Spatial Statistics and Its Applications*, Vol. 1, Zanjan, Iran, 1-6.

109- Zahmatkesh, S. and **Mohammadzadeh, M.** (2019), Bayesian Joint Modeling of Spatio-temporal Data with Non-ignorable Missingness, *Proceedings of the 3rd Seminar on Spatial Statistics and Its Applications*, Vol. 1, Zanjan, Iran, 65-73.

110- Saadati, S. and **Mohammadzadeh, M.** (2019), Spatio-Temporal Data Analysis via Tucker Decomposition of Covariance Tensor, *Proceedings of the 3rd Seminar on Spatial Statistics and Its Applications*, Vol. 1, Zanjan, Iran, 85-92.

111- Salehi, L. and **Mohammadzadeh, M.** (2019), Comparison of two Composite Likelihood Function for Spatial Generalized Linear Mixed Models, *Proceedings of the 3rd Seminar on Spatial Statistics and Its Applications*, Vol. 1, Zanjan, Iran, 109-118.

112- Gholizadeh, K. and **Mohammadzadeh, M.** (2019), Bayesian Modeling of Spatial Rate Data with Beta Regression Model, *Proceedings of the 3rd Seminar on Spatial Statistics and Its Applications*, Vol. 1, Zanjan, Iran, 149-157.

113- Lotfian, E. and **Mohammadzadeh, M.** (2019), Upgrading Multi-Objective Particle Swarm Algorithm for Optimal Spatial Sampling, *Proceedings of the 3rd Seminar on Spatial Statistics and Its Applications*, Vol. 1, Zanjan, Iran, 158-169.

114- Salehi, L. and **Mohammadzadeh, M.** (2020), Analysis of Spatial Generalized Linear Mixed Model with Paired Composite Likelihood, *Proceedings of the 15th Iranian Statistics Conference*, Yazd, Iran, 329-338.

115- Gholizadeh, K. and **Mohammadzadeh, M.** (2020), Approximate Bayesian Analysis and Simultaneous Modeling of the Mean and Precision Parameters in Beta Regression Model, *Proceedings of the 15th Iranian Statistics Conference*, Yazd, Iran, 445-453.

116- Lotfian, E. and **Mohammadzadeh, M.** (2020), Design of Multi-Objective Optimal Spatial Sampling, *Proceedings of the 15th Iranian Statistics Conference*, Yazd, Iran, 477-484.

117- Malaee, S. N. and **Mohammadzadeh, M.** (2020), Variable Selection in Spatial Autoregression Model with Maximum Quasi Likelihood Method, *Proceedings of the 15th Iranian Statistics Conference*, Yazd, Iran, 555-561.

118- **Mohammadzadeh, M.** and Lotfian, E. (2020), Spatial Sampling Design by Multi-Objective Optimization Techniques, *Proceedings of the 15th Iranian Statistics Conference*, Yazd, Iran, Vol 2, 553-560.

119- Zahmatkesh, S. and **Mohammadzadeh, M.** (2021), Spatial Data Classification with Support Vector Machines, *Proceedings of the 4th Seminar on Spatial Statistics and Its Applications*, 27-28 October 2021, Tehran, Iran, Vol 1, 53-60.

120- Salehi, L. and **Mohammadzadeh, M.** (2021), Laplace Approximation for Spatial Generalized Linear Models, Case Study: Household Costs in Urban Areas Data, *Proceedings of the 4th Seminar on Spatial Statistics and Its Applications*, 27-28 October 2021, Tehran, Iran, Vol 1, 69-74.

121- Lotfian, E. and **Mohammadzadeh, M.** (2021), Design of Multi-objective Optimal Spatial Sample for Geostatistical Surveys, *Proceedings of the 4th Seminar on Spatial Statistics and Its Applications*, 27-28 October 2021, Tehran, Iran, Vol 1, 185-192.

122- **Mohammadzadeh, M.**, and Nahardani, Z. (2021), Bayesian Analysis of Spatial Survival Data with Explicit Modeling of Spatial Correlation Structure, *Proceedings of the 4th Seminar on Spatial Statistics and Its Applications*, 27-28 October 2021, Tehran, Iran, Vol 1, 209-215.

123- Kazemi, K., **Mohammadzadeh, M.** and Motarjem, K. (2021), Spatial Generalized Linear Mixed Model for Analysis of Covid-19 Data, *Proceedings of the 4th Seminar on Spatial Statistics and Its Applications*, 27-28 October 2021, Tehran, Iran, Vol 1, 141-147.

124- Malaeke, S. N. and **Mohammadzadeh, M.** (2021), Shrinkage of High-Dimensional Bayesian Spatial Autoregressive Models, *Proceedings of the 4th Seminar on Spatial Statistics and Its Applications*, 27-28 October 2021, Tehran, Iran, Vol 1, 231-238.

125- Amiri, F. and **Mohammadzadeh, M.** (2022), Analysis of High-dimensional Spatial Data with Partially Linear Additive Regression Model, *Proceedings of the 16th Iranian Statistics Conference*, Babolsar, Iran, 70-75.

126- Lashgari, S. and **Mohammadzadeh, M.** and Ghaderi, F. (2022), Variable Selection Using Adaptive Elastic-net Sliced Inverse Regression, *Proceedings of the 16th Iranian Statistics Conference*, Babolsar, Iran, 441-445.

127- Lotfian, E. and **Mohammadzadeh, M.** (2022), A Hybrid AMOSA\_NSGA-II Algorithm for Multi-objective Optimization of Geostatistical Data, *Proceedings of the 16th Iranian Statistics Conference*, Babolsar, Iran, 447-452.

128- Khajenoori, A., Saniee Abadeh, M. and **Mohammadzadeh, M.** (2024), A Cost-Sensitive Genetic Algorithm for Customer Segmentation in Auto Insurances, 14th International Conference on Computer and Knowledge Engineering (ICCKE), 405-410. DOI: 10.1109/ICCKE65377.2024.10874585.

129- Asadi, S. and **Mohammadzadeh, M.** (2025), A Hybrid Neural Network Framework for Zero-Inflated Spatial Survival Analysis, *Proceedings of the 6th Seminar on Spatial Statistics and Its Applications*, 29-30 October 2025, Semnan, Iran, Vol 1, 5-12.

130- **Mohammadzadeh, M.**, and Dalia Badee. (2025), Extending Random Forest Method for Analysing Spatial Data, *Proceedings of the 6th Seminar on Spatial Statistics and Its Applications*, 29-30 October 2025, Semnan, Iran, Vol 2, 45-52.

131- Ahmadvand, M. and **Mohammadzadeh, M.** (2025), Neural Networks for Spatio-Temporal Data Analysis, *Proceedings of the 6th Seminar on Spatial Statistics and Its Applications*, 29-30 October 2025, Semnan, Iran, Vol 1, 1-8.

132- Ansari, A., **Mohammadzadeh, M.** and Motarjem , K. (2025), Modeling of Large Spatio-Temporal Datasets Using Auxiliary Lattice, *Proceedings of the 6th Seminar on Spatial Statistics and Its Applications*, 29-30 October 2025, Semnan, Iran, Vol 1, 9-16.

133- Dashti, S. and **Mohammadzadeh, M.** (2025), Spatial Modeling of Forex Market Co-movements and Return, *Proceedings of the 6th Seminar on Spatial Statistics and Its Applications*, 29-30 October 2025, Semnan, Iran, Vol 1, 63-70.

134- Saghari, F. and **Mohammadzadeh, M.** (2025), Modeling Spatially Dependent Survival Data at the Subject Level, *Proceedings of the 6th Seminar on Spatial Statistics and Its Applications*, 29-30 October 2025, Semnan, Iran, Vol 1, 71-78.

135- Satarimehr, Z. and **Mohammadzadeh, M.** (2025), Bayesian Analysis of Spatio-Temporal Occupancy Model For Symbiotic Species, *Proceedings of the 6th Seminar on Spatial Statistics and Its Applications*, 29-30 October 2025, Semnan, Iran, Vol 1, 79-86.

136- Faghirzadeh, F. and **Mohammadzadeh, M.** (2025), Bayesian Semiparametric Spatial Survival Analysis, *Proceedings of the 6th Seminar on Spatial Statistics and Its Applications*, 29-30 October 2025, Semnan, Iran, Vol 1, 127-134.

137- Vaezi, S., **Mohammadzadeh, M.** and Safaei, A. (2025), Traffic And Weather Conditions Modeling Using A Spatio-Temporal Neural Network, *Proceedings of the 6th Seminar on Spatial Statistics and Its Applications*, 29-30 October 2025, Semnan, Iran, Vol 1, 183-190.

### Title of Talks in Conferences:

- 1- **Mohammadzadeh, M.**, (1989), Asymptotic Distribution of Empirical Bayes Estimator of Parameter of One Parameter Exponential Family, *The International Conference on Recent Developments in Statistical Data Analysis and Inference*, Neuchatel, Swiss.
- 2- **Mohammadzadeh, M.**, (1994), Generalized Cross-Validation Estimate for Smoothing Parameters, *The 2nd Iranian Statistical Conference*, Mashhad, Iran.
- 3- **Mohammadzadeh, M.**, (1995), Spectral Approximation to the Likelihood Functions, *The 18th Conference in Probability and Statistics*, Oxford, UK.
- 4- **Mohammadzadeh, M.**, (1996), Estimating the Smoothing Parameter in Smoothing Splines, *The 19th Conference in Probability and Statistics*, Southampton, UK.
- 5- **Mohammadzadeh, M.**, (1998), Spectral Estimators in Spatial Data Analysis, *The 29th Annual Iranian Mathematics Conference*, Tehran Polytechnic, Iran.
- 6- **Mohammadzadeh, M.**, (1998), Spectral Approximation to the Likelihood for an Intrinsic Gaussian Random Field, *International Congress of Mathematicians*, Berlin, Germany.
- 7- **Mohammadzadeh, M.**, (1999), Estimation of Covariance Function for Universal Kriging, *The Second Iranian Seminar on Probability and Stochastic Processes*, Tafresh, Iran.
- 8- **Mohammadzadeh, M.**, (2000), Empirical Bayes Estimation for Contaminated Data, *Proceedings of the Fourteen Compstat Conference of the International Association for Statistical Computing, COMPSTAT 2000*, Utrecht, the Netherlands.
- 9- **Mohammadzadeh, M.** and Khaledi, M. (2000), Covariance Estimation for Spatial Regression Residuals, *The fifth Iranian Statistics Conference*, Isfahan University of Technology, Isfahan, Iran.
- 10- Kavousi, A. and **Mohammadzadeh, M.**, (2000), Variogram Estimation for Kriging, *The Fifth Iranian Statistics Conference*, Isfahan University of Technology, Isfahan, Iran.
- 11- Waghei, Y. and **Mohammadzadeh, M.**, (2000), Spatial Analysis of Mortality Rates, *The Fifth Iranian Statistics Conference*, Isfahan University of Technology, Isfahan, Iran.
- 12- **Mohammadzadeh, M.**, and Khaledi, M. (2001), Covariance Estimation for Residuals of Spatial Autoregressive Models, *The 3rd Iranian Seminar on Probability and Stochastic Processes*, Isfahan-Khansar, Iran.
- 13- Waghei, Y. and **Mohammadzadeh, M.**, (2001), Modeling for Anisotropic Variogram, *The 3<sup>rd</sup> Iranian Seminar on Probability and Stochastic Processes*, Isfahan-Khansar, Iran.
- 14- Safari, R. and **Mohammadzadeh, M.**, (2002), Fitting of Cokriging and Multivariate Spatial Prediction, *The Sixth International Statistics Conference*, Tehran, Iran.
- 15- **Mohammadzadeh, M.** and Alimohammadi, R. (2002), Comparison of Spline and Kriging, *The Sixth International Statistics Conference*, Tehran, Iran.

16-**Mohammadzadeh, M.** and Fallah, A. (2002), Data Mining and Huge Data Problem, *The Sixth International Statistics Conference*, Tehran, Iran.

17-Heydari, A and **Mohammadzadeh, M.** and Fallah, A. (2002), Estimation of Parameter of the Exceedance Distribution, *In the Sixth International Statistics Conference*, Tehran, Iran.

18-Zargar, M., **Mohammadzadeh, M.**, and Gerami, A., (2004), Bayesian Quantile Regression, *The 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Iran.

19-**Mohammadzadeh, M.**, and Rivaz, F., (2004), Methods of Spatial Experimental Designs and Their Comparison, *The 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Iran.

20-**Mohammadzadeh, M.**, and Salehi, R., (2004), Using Penalized Regression Spline for Smoothing, *The 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Iran.

21-**Mohammadzadeh, M.**, and Kavoosi, A., (2004), Local Distribution Estimation for Spatial Data with Kriging, *The 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Iran.

22-Moradifard, R. and **Mohammadzadeh, M.**, (2004), Prediction of Nonlinear Spatial Functionals, *The 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Tehran, Iran.

23-**Mohammadzadeh, M.**, (2004), Robust Generalized M-Estimation in Time Series Models in the Presence of Outliers, *The 7th Iranian Statistical Conference*, Allameh Tabatabaei University, Tehran, Iran.

24-Rivaz, F. and **Mohammadzadeh, M.**, (2005), A Review on Different Dependency and Their Related Results, *Workshop of Surveys on Random Variable Dependencies*, Ferdowsi University, Mashhad, Iran.

25-Motarjem, K. and **Mohammadzadeh, M.** (2005), Analysis of Spatio-Temporal Data with Conditional Simulation, *The 5th Iranian Seminar on Probability and Stochastic Processes*, Birjand, Iran.

26-Kavousi, A. and **Mohammadzadeh, M.** (2005), SAR and CAR Models in Analysis of Spatial Lattice Data, *The 5th Iranian Seminar on Probability and Stochastic Processes*, Birjand, Iran.

27-Hosseini, F. and **Mohammadzadeh, M.** (2005), Fuzzy Prediction for Spatial Data, *The 5th Iranian Seminar on Probability and Stochastic Processes*, Birjand, Iran.

28-Minane, S., Zare, D., Khoshtaghaza, M. and **Mohammadzadeh, M.** (2006), Computer Simulation of Rough Rice Drying in a Batch Dryer, *The First National Congress of Food Industry*, Gorgan, Iran.

29-**Mohammadzadeh, M.** (2006), Bayesian Spatial Statistics, *The First Workshop on Bayesian Methods and Applications*, Allameh Tabatabaei University, Tehran, Iran.

30-Iranpanah, N. and **Mohammadzadeh, M.** (2006), A Separate Block Bootstrap Algorithm for Estimation of the precision measures in Spatial Statistics, *The 8th Iranian Statistical Conference*, Shiraz University, Iran.

31-Pasha, E., **Mohammadzadeh, M.**, Mansouri, S. (2006), Determination of Bayesian Maximum Entropy Bivariate Probability Distribution, *The 8th Iranian Statistical Conference*, Shiraz University, Iran.

32-Pasha, E., **Mohammadzadeh, M.**, Naghizadeh, M. (2006), Serial Independence Test with the Functions Distance Criterion, *The 8th Iranian Statistical Conference*, Shiraz University, Iran.

33-**Mohammadzadeh, M.**, Kiapour A. (2006), Indicator Kriging for Spatial Analysis of Soft and Hard Data, *The 8th Iranian Statistical Conference*, Shiraz University, Iran.

34-**Mohammadzadeh, M.**, Heydari, A. (2006), Extreme Value Analysis with Exceedances Thresholds, *The 8th Iranian Statistical Conference*, Shiraz University, Iran.

35-**Mohammadzadeh, M.**, Moradi, S. (2006), Considering the Separability of the Space-Time Random Fields, *The 8th Iranian Statistical Conference*, Shiraz University, Iran.

36-Mohammadi, M. and **Mohammadzadeh, M.**, (2006), Probability Distribution Estimation with Wavelets, *The 8th Iranian Statistical Conference*, Shiraz University, Iran.

37-Hooman, A., Salmehei, H. and **Mohammadzadeh, M.**, (2006), Comparison of Different Multivariate Nonparametric Regression Models, *The 8th Iranian Statistical Conference*, Shiraz University, Iran.

38-**Mohammadzadeh, M.**, Hosseini, F. and Karimi, O. (2006), Bayesian Fuzzy Spatial Prediction, *The 8th Iranian Statistical Conference*, Shiraz University, Iran.

39-Iranpanah, N., **Mohammadzadeh, M.** and Vahidi-Asl, M. Q. (2007), Determination of Optimal Block Size in Separate Block Bootstrap for Analysis of the Observations of a Random Field, *The 6th Seminar on Probability and Stochastic Processes*, Babolsar, Iran.

40-Hosseini, F. and **Mohammadzadeh, M.** (2007), Spatial Analysis of Fuzzy Random Field, *The 6th Seminar on Probability and Stochastic Processes*, Babolsar, Iran.

41-Kavousi, A., Meshkani, M. R. and **Mohammadzadeh, M.** (2007), Auto Multinomial Model for Analysis of the Observations of a Lattice Random Field, *The 6th Seminar on Probability and Stochastic Processes*, Babolsar, Iran.

42-Karimi, O. and **Mohammadzadeh, M.** (2007), Bayesian Analysis of Closed Skew Gaussian Random Field, *The 6th Seminar on Probability and Stochastic Processes*, Babolsar, Iran.

43-Iranpanah, N., **Mohammadzadeh, M.**, and Vahidi-Asl, M. Q., (2007), Estimation of Kriging Variance with Separate Block Bootstrap Method, *The 9th Islamic Countries Conference on Statistical Sciences 2007*, Malaysia.

44-Omidi, M. and **Mohammadzadeh, M.** (2008), Copula Functions and Modeling of Drought in Tehran, *The 9th Iranian Statistical Conference*, Isfahan.

45-Rezaeitabar, V. and **Mohammadzadeh, M.** (2008), Spatial Logistic and Probit Regression Models for Prediction of Frosting Probability, *The 9th Iranian Statistical Conference*, Isfahan.

46-Zarbakhsh, N. and **Mohammadzadeh, M.**, (2008), Spatial Analysis of Water Pollution in Jajrood River and Latin Dam, *The 9th Iranian Statistical Conference*, Isfahan.

47-Zargar, M. and **Mohammadzadeh, M.**, (2008), Prediction Interval of Life Time with Fixed and Random Sample Sizes, *The 9th Iranian Statistical Conference*, Isfahan.

48-Karimi, O. and **Mohammadzadeh, M.**, (2008), Bayesian Analysis of Closed Skew Probit Model for Auto-correlated Spatial Data with Missing Data, *The 9th Iranian Statistical Conference*, Isfahan.

49-Fallah, A. and **Mohammadzadeh, M.**, (2008), Linkage of Workhouse Censuses with Probabilistic Models, *Proceedings of the 9th Iranian Statistical Conference*, Isfahan.

50-Rahmani, R. and **Mohammadzadeh, M.**, (2008), Determination of Disclosure Risk and Immunization of Frequency Tables, *Proceedings of the 9th Iranian Statistical Conference*, Isfahan.

51-Zarei, S. and **Mohammadzadeh, M.**, (2008), Hierarchical Bayes Estimation of Low-Counting in Census by Small Area Techniques, *Statistical Center of Iran*, Tehran, Iran.

52-Mahmoudian, B., **Mohammadzadeh, M.**, and Golalizadeh, M., (2009), Extreme Value Analysis with Vector Generalized Additive Models, *Proceedings of the 7th Seminar on Probability and Stochastic Processes*, Isfahan, Iran.

53-Fallah, A. and **Mohammadzadeh, M.**, (2009), Logistic Regression Analysis for Linked Data, *International Conference in Mathematical Sciences*, Istanbul, Turkey.

54-Hosseini, F., Eidsvik, J. and **Mohammadzadeh, M.**, (2009), Bayesian Inference in Spatial Models with Skew Normal Latent Variable, *EPSRC Symposium Workshop on Markov Chain-Monte Carlo*, Warwick, UK.

55-Baghishani, H., and **Mohammadzadeh, M.**, (2009), Asymptotic Properties of Data Cloning Based Estimators, *The 7th Seminar on Probability and Stochastic Processes*, Isfahan, Iran.

56-Rivaz, F., **Mohammadzadeh, M.**, and Khaledi, M. J., (2009), Bayesian Prediction for Spatio-Temporal Gaussian Random Fields, *The 7th Seminar on Probability and Stochastic Processes*, Isfahan, Iran.

57-**Mohammadzadeh, M.** and Karimi, O., (2010), Bayesian Spatial Prediction for Closed Skew Gaussian Random Field, *Ninth Valencia International Meeting on Bayesian Statistics*, Valencia, Spain.

58-**Mohammadzadeh, M.**, (2010), An Undesirable Feature in Nonseparable Spatial-Temporal Covariance Functions, *NORDSTAT 2010*, Voss, Norway.

59-Hosseini, F., and **Mohammadzadeh, M.**, (2010), Bayesian Analysis of Spatial GLMM with Skew Normal Latent Variables, *Proceedings of the IAMG2010*, Budapest, Hungary.

60-Hosseini, F. and **Mohammadzadeh, M.**, (2010), Approximate Maximum Likelihood Estimation of Spatial GLM Models with Closed Skew Normal Latent Variables, *The 10th Iranian Statistical Conference*, Tabriz.

61-**Mohammadzadeh, M.**, and Hosseini, F. (2011), Bayesian Analysis of Spatial GLMM with Closed Skew Normal Latent Variables, *Workshop on Bayesian Inference for Latent Gaussian Models*, Zurich.

62-Baghishani, H., and **Mohammadzadeh, M.** (2011), Data Cloning Method and Its Application in Generalized Linear Mixed Models, *Workshop on Bayesian Inference for Latent Gaussian Models*, Zurich.

63-**Mohammadzadeh, M.**, and Hosseini, F., (2011), Maximum Likelihood Estimation for Spatial GLM Models, *The 1st Conference on Spatial Statistics 2011*, Enschede, The Netherlands.

64-Mousavi, S. S., and **Mohammadzadeh, M.**, (2011), Trend Modeling and Its Effect on correlation Structure of Spatio-Temporal Random Field, *The 8<sup>th</sup> Seminar on Probability and Stochastic Processes*, Rasht, Iran.

65-Hosseini, F., Karimi, O., and **Mohammadzadeh, M.**, (2011), The Discrete form of a Closed Skew Gaussian Random Field and Its Applications, *The 8<sup>th</sup> Seminar on Probability and Stochastic Processes*, Rasht, Iran.

66-Waghei, Y., **Mohammadzadeh, M.**, and Keyvanshokoh, E. (2011), Making Covariance Model for Anisotropic Random Fields, *The 8<sup>th</sup> Seminar on Probability and Stochastic Processes*, Rasht, Iran.

67-Omidi, O., and **Mohammadzadeh, M.** (2012), Construction of Spatio-Temporal Covariance Functions with Archimedian Copula Function, *The 11th Statistical Conference*, Tehran, Iran.

68-**Mohammadzadeh, M.** and Mousavi, S. S. (2012), Space-Time Analysis of Troposphere Ozone in Tehran City, *IMS 2012*, Istanbul, Turkey.

69-**Mohammadzadeh, M.**, Ghayyomi, M. and Gholizadeh, K. (2013), Using INLA in Spatial Latent Gaussian Modeling to Analyze Housing Prices Data in Tehran City, *Spatial Statistics 2013*, 4-7 June, Columbus, Ohio, USA.

70-**Mohammadzadeh, M.** and Omidi, M. (2013), A New Method for Construction Spatio-Temporal Covariance Function with Copula Functions, *The 29th European Meeting of Statisticians*, 20-25 July, Budapest, Hungary.

71-**Mohammadzadeh, M.**, (2013), Prediction for Closed Skew Gaussian Random Field, *The 9th Seminar on Probability and Stochastic Processes*, Zahedan, Iran.

72-**Mohammadzadeh, M.**, and Rasouli, H. R. (2013), Bayesian Analysis of Spatial Dynamic Panel Regression Models, *GeoMed 2013*, 16-18 September, Sheffield, UK.

73-**Mohammadzadeh, M.**, Rasouli, H. R. and Karami, H. R. (2014), Bayesian Analysis of Spatio-Temporal Dynamic Panel Models with Fixed and Random Effects, *Bayes2014*, 11-13 June, London, UK.

74-Omidi, M. and **Mohammadzadeh, M.** (2014), Non-Gaussian Interpolation for Khuzestan Rainfall Data Using Spatial Copula Functions, *The 12th Iranian Statistical Conference*, Kermanshah, Iran.

75-Sasani, S. and **Mohammadzadeh, M.** (2014), The Lagrange Multiplier Test for Spatial Correlation of Errors in Spatial Panel Regression Models, *The 12th Iranian Statistical Conference*, Kermanshah, Iran.

76-Rasouli, H., **Mohammadzadeh, M.** and Karami, H. (2014), Modeling of Economical and Crimes Indexes with Dynamic Spatial Panel Regression Model, *The 12th Iranian Statistical Conference*, Kermanshah, Iran.

77-Mahdianfar, N. and **Mohammadzadeh, M.** (2014), Bayesian Melding Model and Spatial Analysis of Ozone Data in Tehran City, *The 12th Iranian Statistical Conference*, Kermanshah, Iran.

78-Abyar, A., **Mohammadzadeh, M.**, Motarjem, K. and Roshandel, Gh. (2014), Survival Cox and Proportional Hazards Models for Analysis of Esophageal Cancer Data, *The 12th Iranian Statistical Conference*, Kermanshah, Iran.

79-Sadeghian, A., Waghei, Y. and **Mohammadzadeh, M.** (2014), Spatio-Temporal Separable Covariogram Models and Kriging Prediction, *The 12th Iranian Statistical Conference*, Kermanshah, Iran.

80-Sasani, S., and **Mohammadzadeh, M.** (2014), Lagrange Multiplier Test for Spatial Correlation of Errors in Spatial Panel Regression Model, *The 12th Iranian Statistical Conference*, Kermanshah, Iran.

81-Rasouli, H. R., **Mohammadzadeh, M.** and Karami, H. R. (2014), Modeling Economic and Criminal Indicators with Spatial Dynamic Panel Regression Models, *The 12th Iranian Statistical Conference*, Kermanshah, Iran.

82-**Mohammadzadeh, M.**, Motarjem, K. and Abyar, A. (2015), Survival Modeling of Spatially Correlated Data, *Proceedings of the First Seminar on Reliability Theory and Its Applications*, May 27-28, 2015, Isfahan, Iran.

83-Mateu, J., Omidi, M., Ayyad, C., **Mohammadzadeh, M.** and Tamayo, I. (2015). Spatially Dependent Count Data Prediction Using A Copula Approach: Application to Rat and Cockroach Sightings, *In Spatial Statistics Conference 2015*.

84-Boroumandi, M., Khamehchiyan, M., Nikoudel, M. R. and **Mohammadzadeh, M.** (2015), Assessment of Soil Pollution by heavy Metals in Zanjan Province, Iran, GIMAR 2015, Dubai, UAE.

85-Esmati, M. and **Mohammadzadeh, M.** (2016), Spatio-Temporal Prediction of Nonstationary Nonseparable Random Fields, *13th Iranian Statistical Conference*, Kerman, Iran.

86-Bromandi, M., Khamehchian, M., Nikodel, M. R. and **Mohammadzadeh, M.** (2016), Soil Pollution Assessment and Identification of Soil Pollutant Sources in Zanjan Province, Iran, The 34th National & 2nd International Geosciences Congress, 22-24 February, Tehran, Iran.

87-Motarjem, K., **Mohammadzadeh, M.** and Abyar, A. (2016), Analyzing High-Dimensional Survival Data Using Random Forests, *Third International Conference on Analysis and Applied Mathematics*, Institute of Mathematics and Mathematical Modelling, 7-10 September 2016, Almaty, Kazakhstan.

88-**Mohammadzadeh, M.**, Fallah, Z. and Baghfalaki, T. (2016), Bayesian Analysis of Augmented Mixed Beta Models with Skew-Normal Random Effects, *ISBA2016 World Meeting, International Society for Bayesian Analysis*, 13 -17 June 2016, Forte Village Resort Convention Center Sardinia, Italy.

89-**Mohammadzadeh, M.** and Kalhori, L. (2017), Bayesian Analysis of Spatial Beta Generalized Linear Mixed Models, *18th Annual Conference IAMG 2017*, 2-9 September 2017, Fremantle, Australia.

90-Motarjem, K., **Mohammadzadeh, M.** and Abyar, A. (2017), The Effect of Spatial Intensity Correlation on Estimation of the Cox Model, *34th International Seminar on Stability Problems for Stochastic Model*, 25-29 August 2017 in Debrecen, Hungary.

91-**Mohammadzadeh, M.** and Fallah, Z. (2017), Augmented Spatial Beta Regression Model, *2nd Seminar on Spatial Statistics and Its Applications*, 25-26 October 2017, Shahrood, Iran.

92-**Mohammadzadeh, M.** and Zahmatkesh, S. (2018), Bayesian Prediction of Spatial Data with Non-Ignorable Missingness Using INLA and SPDE, *19th Annual Conference IAMG 2018*, 2-8 September 2018, Olomouc, Czech Republic.

93-Lotfian, E. and **Mohammadzadeh, M.** (2018), Multi-objective Optimization of Spatial Sampling Using Genetic Algorithm, *First Iranian Student Conference on Statistics*, 12 December 2018, Tarbiat Modares University, Tehran, Iran.

94-Zahmatkesh, S. and **Mohammadzadeh, M.** (2018), Bayesian Inference of Spatio-Temporal Missing Data Using INLA and SPDE, *First Iranian Student Conference on Statistics*, 12 December 2018, Tarbiat Modares University, Tehran, Iran.

95-Saadati, S., Esmati, M. and **Mohammadzadeh, M.** (2018), Tucker Decomposition for Analysis of Nonstationary and Nonseparable Random Fields, *First Iranian Student Conference on Statistics*, 12 December 2018, Tarbiat Modares University, Tehran, Iran.

96-Gholizadeh, K. and **Mohammadzadeh, M.** (2018), Analysis of Beta Regression Model Using Integrated Nested Laplace Approximation, *First Iranian Student Conference on Statistics*, 12 December 2018, Tarbiat Modares University, Tehran, Iran.

97-Salehi, L. and **Mohammadzadeh, M.** (2018), Weighted Pairwise Likelihood in Estimation for Spatial Generalized Linear Mixed Models, *First Iranian Student Conference on Statistics*, 12 December 2018, Tarbiat Modares University, Tehran, Iran.

98-Moghadam, M. and **Mohammadzadeh, M.** (2018), Nonparametric Spatial Analysis for Risk Map, *First Iranian Student Conference on Statistics*, 12 December 2018, Tarbiat Modares University, Tehran, Iran.

99-**Mohammadzadeh, M.** and Omidi, M. (2019), Analysis of Spatial Point Pattern Data Using Pair Copulas, *Fifth Seminar on Copula and Its Applications*, 30-31 January, Mashhad, Iran.

100- Lotfian, E. and **Mohammadzadeh, M.** (2020), A Multi-objective Sampling Design for Spatial Prediction Problem, *Bringing Young Mathematician Together BYMAT*, 1-3 December 2020, University of Valencia, Spain.

101- **Mohammadzadeh, M.** (2021), Educational Challenges and Its Impact on the Quantitative and Qualitative Decline of Basic Sciences and Engineering, *Conference on the Role of Scientific Unions in Sustainable Development*, Tehran, Iran.

102- **Mohammadzadeh, M.** (2021), The Role of Statistics in Research for Sustainable Development, *First International Conference on Mathematics and Its Applications*, August 12-13, 2021, Ahvaz, Iran.

103- Ebrahimi, N. and **Mohammadzadeh, M.** (2023), Analysis of Spatial Survival Data Using Copula Functions, *The 7th Seminar on Copula Theory and Its Applications*, February 8-9, 2023, Ferdowsi University, Mashhad, Iran.

104- **Mohammadzadeh, M.** and Asadi, S. (2024), Bayesian Analysis of Spatial Zero-Inflated Survival Regression Models, *17th Iranian Statistics Conference*, University of Birjand, 2022, August, Birjand, Iran.

### Attending International Conferences:

- 1- 45th Session of the International Statistical Institute, Amsterdam, Netherlands, (1985).
- 2- 47th Session of the International Statistical Institute, Paris, France, (1989).

- 3- Shape Recognition in 2-D and 3-D Images, Leeds, UK, (1993).
- 4- 18th Conference in Probability and Statistics, Reading, UK, (1994).
- 5- Young Statisticians Meeting, Edinburgh, UK, (1995).
- 6- Current Issues in Statistical Shape Analysis, Leeds, UK, (1995).
- 7- Second International Congress on Technical and Vocational Education, Seoul, Republic of Korea, (1999).
- 8- International Congress in Commemoration of Hakim Omar Khayyam Neyshabouri, Neyshabour, Iran, (2000).
- 9- 12th General Meeting of Third World Academy of Sciences (TWAS), Tehran, Iran,(2000).
- 10-OSDRT 2006, Conference On Ordered Statistical Data and Related Topics, Ferdowsi University of Mashhad, Iran, (2006).