

## **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

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**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 Kavooosi, 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, Rabiolah: Measuring Risk Criteria for Information Disclosure.
- 27-2008 Omid, 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 Mahmmodian, 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, Mahnegar: 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 Non-separable Random Fields.
- 51-2020 Moghadam, Mohammad: Nonparametric Spatial Analysis for Risk Mapping.
- 52-2021 Malaek, 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 Sajedah 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 Tayebah: Spatial Data Analysis in the Presence of Outliers with Spatial Autocorrelation Quantile Regression.
- 60-2025 Fatemeh Faghirzadeh Spatial Analysis of Generalized Linear Mixed Model.
- 61-2026 Farinaz Omrani: Inflated Discreet Beta Regression Model for Analysis of Spatial Rating Data.

### **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 Omid, 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 Mojtahedzadeh, 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 Hosseinpori, 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., Kouchekzadeh, 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), Quadrature 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.
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- 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 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 Kavooosi, 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., Salmehi, 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-Mahdianfard, 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., Khomehchian, 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., Khomehchian, 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 Omid, 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 7<sup>th</sup> 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, *17<sup>th</sup> 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).