

Curriculum Vitae:

Majid Jafari Khaledi

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Interesting:

Spatial Statistics, Space-Time Data Analysis, Bayesian Analysis.

Academic Qualifications:

- 1998 B.Sc. in Statistics, Allameh Tabatabaee University, Tehran, Iran.
- 2000 MSc. in Statistics, Tarbiat Modares University, Tehran, Iran.
- 2005 PhD. in Statistics, Tarbiat Modares University, Tehran, Iran.

Appointments Held:

- 2005-Present Assistant Professor in Tarbiat Modares University.

Courses Taught:

- Mathematical Analysis
- Probability Theory
- Statistics and Probability of Engineer

Administrative Experiences:

- 2008-2010 Head of Department of Statistics at Tarbiat Modares University.

PhD Project Supervision:

- 2013 Zareifard, H. Modeling and Analysis of Non-Gaussian Spatial Data Based on Scale Mixing of a Closed Skew Gaussian Random Field.

PhD Project Advisory:

- 2010 Afroughi, S. Analysis of Binary Spatial Data Using Auto logistic Model and Inverse Bayes Formula.
- 2011 Naghizadeh, M. Estimating Parameters of Selected Population Under Bounded Loss Functions.
- 2013, Bashari, M. Interactions of Soil Clay Content and Impermeable Surfaces on Temporal Variation of Runoff and Sediment Under Simulated Conditions.

MSc Project Supervision:

- 2008 Farzaneh, N. Optimal Sampling Design for Spatial Prediction and Correlation Structure Estimation.
- 2008 Zare, F. Bayesian Spatial Prediction for Skew-Gaussian Model and Comparison with the Trans Gaussian Model.
- 2008 Zareifard, H. R. Bayesian Spatial Prediction in the Presence of Outliers Using a Generalised Gaussian Model.
- 2009 Mousivand, M. Bayesian analysis for Generalized Linear Geostatistical Models.
- 2009 Farahani, A. Bayesian Inference for Skew Normal Distribution.
- 2009 Nejati, H. Bayesian Model Selection using Bayes Factor.
- 2010 Haghshenas, F. Bayesian Analysis of Gaussian Markov Random Fields Using the Reference Prior.
- 2011 Naji, Z. Spatial Skew-Gaussian Regression.
- 2011 Hosseinpouri, M. Bayesian Analysis of Spatial Models Based on Censored Data

- 2011 Kaveh, M. Bayesian Analysis of Spatial Ordered Categorical Data Using Clipped Latent Variable Model.
- 2012 Talkhabi, M. Bayesian Analysis of Dynamic Hierarchical Spatio-Temporal Models with Multivariate Responses.
- 2012 Moradi, H. Bayesian Analysis of Multilevel Spatial Models with Varying Coefficients.
- 2012 Tadayon, V. Analysis of Non-Gaussian Spatial Models in the Presence of Censored Data
- 2012 Shahraki, S. Modeling of Trend Function in Spatial and Spatio-Temporal Regression Based on Kernel Averaged Predictors.
- 2013 Faridi, M. Inverse Bayes Formula for Analysis of Hierarchical Latent Variable Models.
- 2013 Roozbeh, M. Areal Spatial Data Analysis Using Generalized Linear Mixed Models.

MSc Project Advisory:

- 2007 Yadegari, I. Skew-Normal Distributions and its Properties.
- 2008 Zarei, S. Hierarchical Bayes Method for Small Area Estimation.
- 2012 Mahmoudi, I. Optimal Allocation Methods in Multivariate Stratified Sampling.

Publications:

1. Khaledi, M. J. and Mohammadzadeh, M., (2006), Bayesian Prediction in Spatial Data Analysis, Iranian Journal of Mathematical Sciences and Informatics, Vol. 1 No. 1, 33-46.
2. Khaledi, M. J. and Mohammadzadeh, M., (2006), Hierarchical Bayes Spatial Prediction for a Noisy Log-Gaussian, Journal of Statistical Theory and Applications, Vol. 5 No. 1, 9-16.
3. Khaledi, M. J. and Rivaz, F., (2006), Determination of Optimal Sampling Design for Spatial Data Analysis, Journal of Statistical Research of Iran (in Persian), Vol. 2 No. 1, 53-60.
4. Rivaz, F., Mohammadzadeh, M., and Khaledi, M. J. (2007). Empirical Bayes prediction for Space-Time Data under Separable Models. Journal of Statistical Research (in Persian), Vol. 1, No. 1, 45-61.
5. Yadegari, I., Gerami, A. and Khaledi, M. J. (2008). A generalization of the Balakrishnan skew-normal distribution. Statistics and Probability Letters, Vol. 78, 1165-1167.

6. Khaledi, M. J. and Rivaz, F. (2009). Empirical Bayes Spatial Prediction using a Monte Carlo EM Algorithm. *Journal of Statistical Methods and Applications*, Vol. 18, 35-47.
7. Zarei, S., Gerami, A. and Khaledi, M. J. (2009). Small Area Estimation of the mean of Household's Income in Selected Provinces of Iran with Hierarchical Bayes Approach. *Journal of Statistical Research of Iran (in Persian)*, Vol. 4, 71-90.
8. Farzaneh, N. and Khaledi, M. J. (2008). Sensitivity Analysis of Spatial Sampling Design for Optimal Prediction. *Journal of Statistical Research of Iran (in Persian)*. Vol 1, No 1, 1-19.
9. Khaledi, M. J. (2008). Bayesian Prediction in Geostatistical Models with Matern Correlation Function. *Iranian Journal of Science and Technology, Transaction A*, Vol. 32, No. A4, 305-311.
10. Afroughi, S., Faghihzadeh, S., Khaledi, M. J. and Ghandehari, M. (2010). Dental caries analysis in 3–5 years old children: A spatial modeling. *Archives of Oral Biology*, Volume 55, Issue 5, 374-378.
11. Zareifard, H. and Khaledi, M. J. (2010). Evaluation and application of the Gaussian-log-Gaussian spatial model for robust Bayesian prediction of Tehran air pollution data. To appear in *Journal of Statistical Research of Iran (in Persian)*.
12. Rivaz, F., Mohammadzadeh, M., and Khaledi, M. J. (2011). Spatio-temporal modeling and prediction of CO concentrations in Tehran city. *Journal of Applied Statistics*, 38, 1995-2007.
13. Afroughi, S. Faghihzadeh, S. Khaledi, M. J., Motlaghd, M. G. Hajizadeh, E. (2011). Analysis of clustered spatially correlated binary data using autologistic model and Bayesian method with an application to dental caries of 3-5 year old children. *Journal of Applied Statistics*, 38, 2763-2774.
14. Kaveh, M. and Khaledi, M. J. (2013). Estimation in truncated GLG model for ordered categorical spatial data using the SAEM algorithm. *Communication in Statistics, Simulation and Computation (In Press)*.
15. Zareifard, H. and Khaledi, M. J. (2013). Empirical Bayes estimation in regression models with generalized skew-slash errors. *Communication in Statistics, Theory and Methods*, 42: 1105–1123.

16. Zareifard, H. and Khaledi, M. J. (2013). Non-Gaussian modeling of spatial data using scale mixing of a unified skew Gaussian . *Journal of Multivariate Analysis* , 114; 16–28.

17. Afroughi, , Motlaghd, M. G. Faghihzadeh, S., Khaledi, M. J. (2013). A model for analyzing spatially correlated binary data clustered in uncorrelated lattices . *Statistical Methodology*, Volume 14, Pages 1-14.

Selected Conferences:

1. Mohammadzadeh, M., Khaledi, M. J. and Rivaz, F. (2006), Bayesian Spatial Prediction by Model Averaging, *Proceedings of the ISBA 8th World Meeting on Bayesian Statistics*, Benidorm, Spain.
2. 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.
3. Khaledi, M. J. and Rivaz, M., (2006), Spatial Prediction using Bayesian Model Averaging, *Proceedings of the 8th Iranian Statistical Conference*, Shiraz University, Iran, 33.
4. Hosseinpouri, M. and Khaledi, M. J., (2010). Stochastic Approximation Boosting Algorithm for Spatial Censored Data. *Proceedings of the 41st Annual Iranian Mathematics Conference*, University of Urmia, Urmia, Iran.
5. Hosseinpouri, M. and Khaledi, M. J., (2010). Monte Carlo Approximation of Likelihood Function in Spatial Models with Censored Data (In persian). *Proceedings of the 41st Annual Iranian Mathematics Conference*, University of Urmia, Urmia, Iran.
6. Farahani, A. F. and Khaledi, M. J. (2010). Bayesian Inference of Skew-Normal Distribution Based on Non-central t distribution for Skewness parameter (in persian), *Proceedings of the 10th Iranian Statistical Conference*, Tabriz, Iran, 337-348.
7. Hosseinpouri, M. and Khaledi, M. J. (2010). Bayesian Analysis of Censored Spatial Data Using Data Augmentation. (in persian), *Proceedings of the 10th Iranian Statistical Conference*, Tabriz, Iran.
8. Zareifard, H. and Khaledi, M. J. (2010). Robust Bayesian Estimation of Spatial Regression Parameters Using a Heavy-tailed Distribution for Nugget Effect Term. (in persian), *Proceedings of the 10th Iranian Statistical Conference*, Tabriz, Iran.
9. Naji, Z. and Khaledi, M. J. (2010). Likelihood Inference in Trans-Gaussian Spatial Regression Using EM Algorithm. (in persian), *Proceedings of the 10th Iranian Statistical Conference*, Tabriz, Iran.