



## Hamid Ghorbani

Assistant Professor

College: Faculty of Mathematics

Department: Statistics and Applications

### Education

Degree	Graduated in	Major	University
BSc	1999	Statistics	Isfahan University (Iran)
MSc	2001	Statistics	Shahid Beheshti University (iran)
Doctoral	2004	Statistics	Technische Universität Bergakademie Freiberg (Germany)

### Papers in Conferences

1. چهارمین کنفرانس بین المللی جبر, Regression models with stationary autocorrelated errors, حمید قربانی, 04 07 2023, کاشان, 1 - کاشان, (یادبود پروفسور علی رضا اشرفی), 1 - کاشان, 04 07 2023, محاسباتی, نظریه‌ی محاسباتی اعداد و کاربردها
2. H. Ghorbani, A stochastic geometrical model for describing the microstructures observed in the material sciences, ۲۵th Workshop on Applied Stochastic Process, ۲۰۲۴, کاشان.
3. حمید قربانی, بررسی آماری سریهای زمانی مشاهده شده در برخی ایستگاههای هیدرومتری حوضه آبریز زاینده رود از دیدگاه توصیفی, هجدهمین همایش ملی علوم و مهندسی آبخیزداری ایران, کاشان, ۱۶ اسفند ۱۴۰۲
4. چهارمین کنفرانس بین المللی جبر, Classic stochastic models for describing network data, حمید قربانی, 04 07 2023, کاشان, (یادبود پروفسور علی رضا اشرفی), کاشان, 04 07 2023, محاسباتی, نظریه‌ی محاسباتی اعداد و کاربردها
5. H. Ghorbani, Multivariate Mahalanobis Distance, The Third Conference on Computational Group Theory, Computational Number Theory and Applications, 2018 12 12.
6. H. Ghorbani, Multicollinearity In Linear Regression Models and Its Diagnostics, The Third Conference on Computational Group Theory, Computational Number Theory and Applications, Kashan, 2018 12 12.
7. H. Ghorbani, Mahalanobis Distance and Its Application For Detecting Multivariate Outliers, The Third Conference on Computational Group Theory, Computational Number Theory and Applications, Kashan, 2018 12 12.
8. H. Ghorbani, Estimating Boolean model parameters with random circular primary grains, 1th International conference on modern technologies in sciences, Amol, 2017 09 07.
9. H. Ghorbani, Galaxies counts-in-cells distributions, 1th International conference on modern technologies in sciences, Amol, 2017 09 07.
10. H. Ghorbani, Stereology and Its Applications, 1th International conference on modern technologies in sciences, Amol, 2017 09 07.
11. H. Ghorbani, Distance based probabilistic models on permutation groups in R statistical software, 9th Iranian Group Theory Conference, Kashan, 2017 02 01.
12. H. Ghorbani, A probabilistic model on permutation groups based on Kendall's tau distance, 9th

Iranian Group Theory Conference ,Kashan ,2017 02 01.

13. H. Ghorbani ,Spatial Modelling of Porous Media Microstructure using the Boolean Model ,Iranian Conference on Mathematical Physics ,Qom ,2016 11 03.

14. H. Ghorbani ,Estimation the parameters of Boolean model using stereological methods ,47th Annual Mathematics Conference ,Karaj ,2016 08 31.

15. H. Ghorbani ,Modeling of the spatial growth process using stochastic geometry ,47th Annual Mathematics Conference ,Karaj ,2016 08 31.

16. H. Ghorbani ,Statistical tests for cluster detection in spatial data ,2th National Conference on Computational Sciences ,Damghan ,2016 08 28.

17. H. Ghorbani ,Big data analysis using RHadoop ,Big Data ,Kashan ,2016 05 25.

18. H. Ghorbani ,Stochastic Modelling of Crystallization Process of Polymers ,12th International Seminar on Polymer Science and Technology ,pp. H. Ghorbani ,Tehran ,2016 02 11.

19. حمید قربانی ,Pair correlation function and its role in characterizing a system of randomly dispersed particles ,8th Iranian Conference on Mathematical Physics ,قم ,۱۴۰۳.

## Papers in Journals

---

1. H. Ghorbani.Spurious correlation and the closure property of compositional data in earth sciences.Iranian Journal of Geology،۲۷،۲۰۲۴-۱۵ شماره صفحات ۱۸، شماره ۷۰، مجلد ۱، ISC.

2. H. Ghorbani.Determination of best fit probability distribution of annual maximum daily precipitation (Case study- Isfahan and Kashan synoptic stations).Journal of Mathematics and Society،۲۰۲۲.

3. Ghorbani, H, et. al..Long-Term Statistical Analysis of Meteorological Drought Trends in Isfahan Province.Desert Ecosystem Engineering Journal،۱۱،۲۰۲۲ مجلد.

4. H. Ghorbani and Et al..Comparative Evaluation of Statistical Models and Artificial Intelligence for Drought Prediction in Isfahan Synoptic Station.Desert Management،۳۶،۲۰۲۲-۱۵ شماره صفحات ۱۰، مجلد ۱۰.

5. H. Ghorbani,Pair correlation function and its role in characterizing a system of randomly dispersed particles,Transactions in Theoretical and Mathematical Physics,Vol. 1,pp. 80-84,2024.

6. H. Ghorbani, M.R. Irshad,Comments on Irshad et al. (2021) "The Zografos-Balakrishnan Lindley Distribution: Properties and Applications",Statistica,Vol. 82,2022.

7. H. Ghorbani,Carrying out single-stage probability sampling designs using functions in R software,Biometrics & Biostatistics International Journal,Vol. 2022,pp. 15-20,2022.

8. H. Ghorbani,III-conditioning in linear regression models and its diagnostics,Journal of the Korean Society of Mathematical Education Series B: THE PURE AND APPLIED MATHEMATICS,Vol. 27,No. 2,pp. 71-81,2020.

9. H. Ghorbani,Comments on Schoenberg et al. (2003) (On the distribution of wildfire sizes),Environmetrics,Vol. 30,No. 8,pp. 1-5,2019,ISI.

10. H. Ghorbani , Vali, A. , Zarepour, H.,Analysis of the Climatological Drought Trend Variations Using Mann-Kendall, Sen and Pettitt Tests in Isfahan Province,Journal of Spatial Analysis Environmental Hazards Journal of Spatial Analysis Environmental Hazards,2019.

11. H. Ghorbani , Vali, A. , Zarepour, H.,Prediction and Investigation of Meteorological Drought Using SARIMA Time Series and SPI index In Isfahan Province (in Persian),Journal of Water and Soil Science,2019.

12. H. Ghorbani,Mahalanobis distance and its application for detecting multivariate outliers,Facta Universitatis, Series: Mathematics and Informatics,Vol. 34,No. 3,pp. 583-595,2019,ISI.

13. H. Ghorbani,Golden Ratio: The Mathematics of Beauty,Mathematics Interdisciplinary Research (MIR),2019,ISC.

14. Genest, Christian; Lauritzen, Steffen L,Translated into Persian: Les mosaïques de Thiele,Mathematics and Society,Vol. 3,No. 3,pp. 37-46,2018.

15. Ghorbanai, H and Amini, A,Forecasting the Natural Gas Consumption in homes of Isfahan using decomposition of main components and SARIMA models with R statistical software (in Persian),Nedaye

Amari, Vol. 14, No. 2, pp. 38-29, 2017.

16. H. Ghorbani, H.J. Müller, D. Stoyan, Using Pareto and Weibull distributions in the modelling of growth processes, South African Statistical Journal, Vol. 40, pp. 75 - 98, 2006, Scopus.

17. H. Ghorbani, D. Stoyan, Estimating the intensity of germ-grain models with overlapping grains, Image Analysis & Stereology, Vol. 22, No. 3, pp. 147-152, 2003, Scopus.

18. H. Ghorbani, K. Shafie, Random Sets and Statistical Inference for Boolean models (in Persian), Andishe'ye Amari, Vol. 6, pp. 34-43, 2001, ISC.