



## Seyed Mahdi Amir Jahanshahi

### Associate Professor

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## Education

- ✓ B.Sc, Statistics, Ferdowsi University of Mashhad - 1999
- ✓ MS, Mathematical Statistics, Ferdowsi University of Mashhad - 2002
- ✓ PhD, Statistics, Ferdowsi University of Mashhad - 2016
- ✓ PhD, Statistics, Ferdowsi University of Mashhad - 2016

## Courses

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|------------------------------------------------|------------------------------------------------------------|
| 1. Statistical Methods                         | 2. Statistics and probability in engineering               |
| 3. Time series                                 | 4. Statistical quality control                             |
| 5. Statistical calculations                    | 6. Topics in statistics                                    |
| 7. Multivariate Continuous Methods1            | 8. Time series 1                                           |
| 9. Multivariate discrete methods1              | 10. Survival data analysis methods                         |
| 11. Sampling methods 1                         | 12. statistical quality control                            |
| 13. Mathematical Statistics2                   | 14. Statistics and its Application in Financial Management |
| 15. Specialist language statistics             | 16. Computer simulation                                    |
| 17. Mathematical Statistics1                   | 18. Design of experiment1                                  |
| 19. Sampling methods 2                         | 20. Time Series2                                           |
| 21. Advanced discussions on Information theory | 22. An Introduction to Official Statistics                 |
| 23. Data analysis                              | 24. Regression 1                                           |

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## Master Thesis

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### 1. On the properties of mixture distributions based on Information Theory

حبيبہ بامري, [Hamed Ahmadzade, Seyed Mahdi Amir Jahanshahi, J J]

نیمسال دوم سال تحصیلی 99-00

### 2. Renyi entropy properties of mixed systems

اسما برهانی پور, [Seyed Mahdi Amir Jahanshahi, Hamed Ahmadzade]

نیمسال دوم سال تحصیلی 99-00

### 3. Climate Variability and Prediction of Annual Precipitation in Southeastern Iran using Stochastic Time Series Model.

فائزہ ناظری, [Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi]

نیمسال دوم سال تحصیلی 99-00

### 4. Irans Vulnerability to Drought

عبدالرئوف شاہوڑئی, [Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi]

نیمسال دوم سال تحصیلی 99-00

### 5. Extropy of order statistics applied to testing symmetry

اسما میری, [Habib Naderi, Seyed Mahdi Amir Jahanshahi, Hamed Ahmadzade, Mehdi Jafari, Mohammad Hossein Dehghan]

نیمسال دوم سال تحصیلی 99-00

### 6. A study of semi-parametric time series models in fuzzy environment

عابدہ ریگی, [Seyed Mahdi Amir Jahanshahi, Amirhamzeh Khammar]

نیمسال دوم سال تحصیلی 99-00

### 7. Design of Nocturnal Early Warning System of Frost in Kurdistan Province in Iran.

ابراہیم مسگری, [Taghi Tavousi, Seyed Mahdi Amir Jahanshahi, Peyman Mahmoudi]

نیمسال اول سال تحصیلی 99-00

### 8. Concepts of generalized conditional information divergence measure

سیدعبدالله شریفی, [Seyed Mahdi Amir Jahanshahi, Amirhamzeh Khammar]

نیمسال اول سال تحصیلی 99-00

### 9. Changing the Pattern of droughts in Iran

فیروزہ میر, [Mahmood Khosravi, Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi]

نیمسال دوم سال تحصیلی 98-99

### 10. Data mining for urban and road accidents data

غلامرسول رجائی, [Seyed Mahdi Amir Jahanshahi, F F]

نیمسال دوم سال تحصیلی 98-99

### 11. Robust t-test

زہرا ملازادہ کشکوئی, [Seyed Mahdi Amir Jahanshahi, Hassan Zarei, Hassan Zarei]

نیمسال اول سال تحصیلی 98-99

### 12. Changing the Pattern of droughts in Iran

فیروزہ میر, [Mahmood Khosravi, Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi]

نیمسال اول سال تحصیلی 98-99

### 13. Design of Nocturnal Early Warning System of Frost in Kurdistan Province in Iran.

ابراہیم مسگری, [Taghi Tavousi, Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi]

نیمسال دوم سال تحصیلی 97-98

#### 14. The Impact of Moonnhase on the Earthquake in Iran from 1921 to 2017

[Samad Fotoohi, Seyed Mahdi Amir Jahanshahi]

نیمسال دوم سال تحصیلی 97-98

#### 15. Goodness of fit tests based on type II right censored samples

[Seyed Mahdi Amir Jahanshahi, A A]

نیمسال دوم سال تحصیلی 97-98

#### 16. A comparison of various tests of normality

[Seyed Mahdi Amir Jahanshahi, Hassan Zarei]

نیمسال دوم سال تحصیلی 97-98

#### 17. Discrete Burr and discrete Pareto distributions

[Mohammad Hossein Dehghan, Seyed Mahdi Amir Jahanshahi, A A]

نیمسال دوم سال تحصیلی 97-98

#### 18. Comparison the estimation methods of parameters for Kumaraswamy-G and Marshall-Olkin Exponential distributions

[Hassan Zarei, Seyed Mahdi Amir Jahanshahi, A A]

نیمسال دوم سال تحصیلی 97-98

#### 19. Stress strength estimation in Exponentiated Frechet, three- parameter generalized Rayleigh two-parameter Exponential distributions

[Seyed Mahdi Amir Jahanshahi, Hassan Zarei]

نیمسال اول سال تحصیلی 97-98

#### 20. Tests of symmetry based on the sample Entropy

[Hassan Zarei, Seyed Mahdi Amir Jahanshahi]

نیمسال اول سال تحصیلی 97-98

#### 21. The Impact of Moonnhase on the Earthquake in Iran from 1921 to 2017

[Samad Fotoohi, Seyed Mahdi Amir Jahanshahi]

نیمسال اول سال تحصیلی 97-98

#### 22. Design of Nocturnal Early Warning System of Frost in Kurdistan Province in Iran.

[Taghi Tavousi, Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi]

نیمسال اول سال تحصیلی 97-98

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## Journals Papers

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### 2021

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#### 1. DETECTION OF LONG-TERM VEGETATION DEGRADATION IN BALUCHISTAN IN SOUTHWEST ASIA USING NDVI PRODUCTS OF THE MODIS SENSOR OF TERRA SATELLITE

Peyman Mahmoudi, Shirazi Safdar Ali, Seyed Mahdi Amir Jahanshahi, Firoozi Fatemeh, Nausheen Mazhar

Environmental Engineering and Management Journal Volume: (20) 317 - 327

#### 2. Spatial and temporal analysis of mean and frequency variations of dry spells in Iran

Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi, Nima Daneshmand, Jabbar Rezaei

Arabian Journal of Geosciences Volume: (14) 1 - 22

#### 3. Climatology of the Sistan Levar wind: Atmospheric dynamics driving its onset, duration and withdrawal

Mohsen Hamidianpour, Seyed Mahdi Amir Jahanshahi, Dimitris G. Kaskaoutis, Alireza Rashki, Panagiotis

ATMOSPHERIC RESEARCH Volume: (260) 105711 - 105751

#### 4. Recommendations for modifying the Standardized Precipitation Index (SPI) for Drought Monitoring in Arid and Semi-arid Regions

Peyman Mahmoudi, Alireza Ghaemi, Allahbakhsh Rigi, Seyed Mahdi Amir Jahanshahi

WATER RESOURCES MANAGEMENT Volume: (35) 3253 - 3275

### 2020

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#### 5. Overlap of North Atlantic Oscillation (NAO) periodicities with periodicities of droughts and wet years of Iran

Samira Razmjo, Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi

Iranian Journal of Geophysics Volume: (14) 91 - 104

#### 6. Modeling changes trend of time series of land surface temperature (LST) using satellite remote sensing productions (case study: Sistan plain in east of Iran)

Fateme Firozi, Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi, Taghi Tavousi, Yong Liu, Zhihua Liang

Arabian Journal of Geosciences Volume: (13) 1 - 14

#### 7. Some New Goodness-of-fit Tests for Rayleigh Distribution

Seyed Mahdi Amir Jahanshahi, Arezo Habibi Rad, Vahid Fakoor

Pakistan Journal of Statistics and Operation Research Volume: (16) 305 - 315

#### 8. A Density-Based Empirical Likelihood Ratio Approach for Goodness-of-fit Tests in Decreasing Densities

Vahid Fakoor, Masoud Ajami, Seyed Mahdi Amir Jahanshahi, Ali Shariati

Statistics, Optimization and Information Computing Volume: (8) 66 - 79

**9. EVALUATING VARIOUS METHODS OF VEGETATIVE COVER CHANGE TREND ANALYSIS USING SATELLITE REMOTE SENSING PRODUCTIONS (CASE STUDY: SISTAN PLAIN IN EASTERN IRAN)**

Firozi Fateme, Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi, Taghi Tavousi, Yong Liu

Carpathian Journal of Earth and Environmental Sciences Volume: (15) 211 - 222

**10. Modeling behaviour of wet and dry days in Iran from the perspective of Markov chains**

Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi, Zohreh Moradi

Mausam Volume: (1) 551 - 566

**11. Modeling behavior of wet and dry days in Iran from the perspective of Markov chains**

Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi, Zohreh Moradi

Mausam Volume: (71) 79 - 94

**12. Detection of land cover changes in Baluchistan (shared between Iran, Pakistan, and Afghanistan) using the MODIS Land Cover Product**

Peyman Mahmoudi, Safdar Ali Shirazi, Fatemeh Firoozi, Seyed Mahdi Amir Jahanshahi, Nausheen Mazhar

Arabian Journal of Geosciences Volume: (13) 1 - 14

**13. The study of the relationship between North Atlantic Oscillations (NAO) index and drought and wet years of Iran in station and regional scales**

Samira Razmjoo, Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi

Volume: (11) 169 - 185

## 2019

**14. ON CUMULATIVE RESIDUAL EXTROPY**

Seyed Mahdi Amir Jahanshahi, Hassan Zarei, A. H. Khammar

PROBABILITY IN THE ENGINEERING AND INFORMATIONAL SCIENCES Volume: (1) 1 - 21

**15. The Burr X Fréchet Model for Extreme Values: Mathematical Properties, Classical Inference and Bayesian Analysis**

Seyed Mahdi Amir Jahanshahi, Haitham Yousof, Vikas Kumar Sharma

Pakistan Journal of Statistics and Operation Research Volume: (15) 797 - 818

**16. Analyzing Temporal and Spatial Variations of Surface Albedo over Sistan Plain in Eastern Iran using Satellite Remote Sensing Product of MODIS Sensor of Terra Satellite**

Fateme Firozi, Taghi Tavousi, Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi

Iranian Journal of Remote Sensing and GIS Volume: (10) 71 - 86

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## 2018

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### 17. On Weighted Cumulative Residual Tsallis Entropy and its dynamic version

, Seyed Mahdi Amir Jahanshahi

PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS Volume: (491) 678 - 692

### 18. Quantile based Tsallis entropy in residual lifetime

- -, Seyed Mahdi Amir Jahanshahi

PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS Volume: (492) 994 - 1006

### 19. The Generalized Transmuted Poisson-G Family of Distributions: Theory, Characterizations and Applications

Haitham Yousof, Ahmed Z Afify, Morad Alizadeh, G. G. Hamedani, Seyed Mahdi Amir Jahanshahi, Indranil

Pakistan Journal of Statistics and Operation Research Volume: (14) 759 - 779

### 20. A New Weibull Class of Distributions: Theory, Characterizations and Applications

Haitham Yousof, Mahbubul Majumder, Seyed Mahdi Amir Jahanshahi, Ali Masoom, Hamedani G. G.

Journal of Statistical Research of Iran Volume: (15) 1 - 39

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## 2017

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### 21. Parameter Estimation In Weighted Rayleigh Distribution

- --, Seyed Mahdi Amir Jahanshahi

Journal of Modern Applied Statistical Methods Volume: (16) 256 - 276

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## 2016

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### 22. Modeling minimum temperature in East Kermanshah Province

, Taghi Tavousi, Seyed Mahdi Amir Jahanshahi

Volume: (16) 47 - 67

### 23. Goodness of fit test under Length Biased Sampling

Seyed Mahdi Amir Jahanshahi, , - -

COMMUNICATIONS IN STATISTICS-THEORY AND METHODS Volume: (15) 7580 - 7592

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## 2009

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### 24. پيش بيني بارندگي و رواناب با الگوهاي استوکستیک در سيستم آبهاي سطحي (مطالعه موردی: حوضه آبریز سد کاوه)

Seyed Mahdi Amir Jahanshahi

Volume: (5) -

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## Conferences Papers

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2021

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1. Statistical Modeling of the Relationship between Albedo and Land Surface Temperature (LST) and Normalized Difference Vegetation Index (NDVI) in Sistan Plain in East of Iran

Third National Conference on Environmental Engineering and Management

Peyman Mahmoudi, Seyed Mahdi Amir Jahanshahi, Fateme Firozi, Heresh Salimpour

2018

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2. Modeling long-term changes trend of vegetation cover in easter Iran using Modis NDVI time series of terra satellite

The 2nd International Conference on Dust

Peyman Mahmoudi, Taghi Tavousi, Seyed Mahdi Amir Jahanshahi, Fateme Firozi

2017

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3. A study on Bayesian estimation methods for the size-biased Rayleigh distribution

The 11th seminar on probability and stochastic processes

, Seyed Mahdi Amir Jahanshahi

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## Research Project

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2017

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1. Detection of land cover changes in Baluchistan (shared between Iran, Pakistan and Afghanistan) using

Peyman Mahmoudi, Safdar Ali Shirazi, Fateme Firozi, Seyed Mahdi Amir Jahanshahi, nausheen mazhar - 2017