



## Mahdi Shams

Assistant Professor

College: Faculty of Mathematics

Department: Statistics and Applications

### Education

Degree	Graduated in	Major	University
BSc	2001	Applied Mathematics	University of Isfahan
MSc	2004	Pure Statistics	Isfahan University of Technology
Ph.D	2013	Statistical inference	Ferdowsi University of Mashhad

### Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
Department of Statistics, Faculty of Mathematical Sciences, University of Kashan, Kashan, Iran	Academic Staff	Tenure Track	Full Time	13

### Work Experience

Leader in National population and housing census (1996)

Head of Department of Statistics (2013-2015)

Advisor to the Scientific Association of Statistics (2017-Present)

Referee in the Journal of Modern Applied Statistical Methods

Referee in the Iranian Journal of Science and Technology, Transactions A: Science

Referee in the Journal of Mathematics Research

Referee in the Mathematics Interdisciplinary Research

Referee in the Iranian Journal of Fuzzy Systems

Referee in the Journal of Classification

## Awards

- Top researcher award (2021), Provided by University of Kashan
- Top teacher award (2020), Provided by University of Kashan
- Top teacher award (2018), Provided by University of Kashan
- Top researcher award (2017), Provided by University of Kashan
- Top researcher award (2015), Provided by University of Kashan
- Top teacher award (2014), Provided by University of Kashan
- Top teacher award (2010), Provided by Ferdowsi University of Mashhad
- Top ranked student award (Ph.D.)(2013), Provided by Ferdowsi University of Mashhad
- Top article award (2012), Provided by Payame noor University
- Top ranked student award (Comprehensive examination) (2009), Provided by Ferdowsi University of Mashhad
- Top ranked student award (M.Sc.2004) ), Provided by Isfahan University of Technology
- Top article award (2004), Provided by Razi University

## Subjects Taught

1) Statistical Inference (Mathematical Statistics I , II)

2) Probability (Introductory, Intermediate I, II)

3) Decision Theory

4) Stochastic Processes

5) Queueing Theory

6) Time Series

7) Information Theory

8) Stochastic Calculus

9) Bayesian Statistics

## Course Topics

1) Statistical Inference (Mathematical Statistics I, II)

2) Probability (Introductory, Intermediate I, II)

3) Decision Theory

4) Stochastic Processes

5) Queueing Theory

6) Time Series

7) Information Theory

## 8) Stochastic Calculus

## 9) Bayesian Statistics

### Competitions

Supervised Student Teams in the 20th National Student Olympiad (2015)

Supervised Student Teams in the 18th Student Competition Statistics (2017)

Supervised Student Teams in the 21th Student Competition Statistics (2019)

### Workshops

9th Iranian Group Theory Conference (2017): Keynote Speaker

"Group invariance and their use in statistics" (9th Iranian Group Theory Conference-2017)

### Conferences

Member of Scientific Committees in 9th Iranian Group Theory Conference (2017)

Referee in 47<sup>th</sup> Annual Iranian Mathematics Conference (2016)

Referee in 22<sup>th</sup> Seminar on Mathematical Analysis and It's Applications (2016)

Referee in 9<sup>th</sup> Iranian Group Theory Conference (2016)

Referee in 11<sup>th</sup> Seminar on Probability and Stochastic Processes (2017)

Committie Member and Reviewe in The 3rd International Conference on Sustainable Energy and Environmental Protection (ICSEEP2018) (Dalian, China)

### Membership in Scientific Societies

Iranian Statistical Society (2005-Present)

### Papers in Conferences

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1. Mehdi Shams ,Uncertainty from the point of view of information theory and fuzzy theory ,4th International Conference on Computational Algebra, Computational Number Theory and Applications ,University of Kashan ,2023.
  2. Mehdi Shams ,Topological group invariance applications in mathematical statistics ,11th Seminar on Geometry and Topology ,2021, یاسوج.
  3. Mehdi Shams ,Group invariance and their use in statistics (Keynote Speaker) ,9th Iranian Group Theory Conference ,Kashan ,2017.

### Papers in Journals

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1. Leila Nasiri ,& Mehdi Shams,Further Operator and Norm Versions of Young Type Inequalities,Sahand Communications in Mathematical Analysis,Vol. 20,No. 4,pp. 33-46,2023.
  2. Mehdi Shams ,& Gholamreza Hesamian,On some main parameters of stochastic processes on

directed graphs, Journal of Algorithms and Computation, Vol. 55, No. 1, pp. 53-65, 2023.

3. Mehdi Shams, Leila Nasiri. The Generalized Inequalities via Means and Positive Linear Mappings. Sahand Communications in Mathematical Analysis. ۱۴۸. ۲۰۲۲-۱۳۳۳ شماره صفحات ۲، شماره ۱۹، مجلد ۱۹.
4. Gholamreza Hesamian, Mohamad Ghasem Akbari, Mehdi Shams, Fuzzy Assessment of Heavy Metal Pollution, International Journal of Industrial Mathematics, Vol. 13, No. 4, pp. 385-394, 2021.
5. Gholamreza Hesamian, Mohamad Ghasem Akbari, Mehdi Shams, Parameter estimation in fuzzy partial univariate linear regression model with non-fuzzy inputs and triangular fuzzy outputs, Iranian Journal of Fuzzy Systems, Vol. 2, No. 18, pp. 51-64, 2021.
6. Mehdi Shams, On weakly equivariant estimators, Statistical Papers, Vol. 62, pp. 1611–1650, 2021.
7. Mehdi Shams, On weak structural sufficiency, Boletín de la Sociedad Matemática Mexicana, Vol. 26, pp. 1313–1332, 2020.
8. Mehdi Shams, Gholamreza Hesamian, Fuzzy Cumulative Distribution Function and its Properties, Journal of Algorithms and Computation, Vol. 2, No. 52, pp. 127-136, 2020.
9. Mehdi Shams, Gholamreza Hesamian, A Proposed Preference Index For Ranking Fuzzy Numbers Based On  $\alpha$ -Optimistic Values, Sahand Communications in Mathematical Analysis, 2019.
10. Mehdi Shams, Gholamreza Hesamian, Sign Test for Fuzzy Random Variables, Journal of Algorithms and Computation, 2018.
11. Gholamreza Hesamian, & Mehdi Shams, A Note on Fuzzy Probability of a Fuzzy Event, INT J INTELL SYST, 2017, ISI, Scopus.
12. Gholamreza Hesamian, & Mehdi Shams, Parametric testing statistical hypotheses for fuzzy random variables, SOFT COMPUT, 2016, ISI, Scopus.
13. Gholamreza Hesamian, & Mehdi Shams, Measuring Similarity and Ordering based on Hesitant Fuzzy Linguistic Term Sets, J INTELL FUZZY SYST, 2015, ISI, Scopus.