

CURRICULUM VITAE

Dr. Maryam Esna-Ashari

Personal Details

- Nationality: Iranian
- Address: 43, West Sarv Ave., Kaj Sq., Saadat Abad, Tehran, Iran
- Telephone: 0098-21-22084084
- Email: esnaashari@irc.ac.ir; m.esnaashari.stat@gmail.com

Education

- PhD in Statistics, University of Isfahan, Iran, 2010–2016
- MSc in Statistics, University of Isfahan, Iran, 2008–2010
- BSc in Statistics, University of Yazd, Iran, 2004–2008

Academic Employment

- Assistant Professor, Insurance Research Center, 2016-present
- Head of Property and Casualty Insurance Research Group, Insurance Research Center, 2019-present

Honors and Awards

- Distinguished BSc graduate, 2008
- Fourth place in the Student Olympiad in the country, 2008
- Second team rank in Student Competitions in the country, 2008
- Second place in University of Isfahan doctoral entrance exam, 2010
- First place in University of Isfahan doctoral comprehensive exam, 2012

Research Interests

- risk analysis of insurance companies
- Calculation of reserves of insurance companies using statistical techniques and methods
- Property and liability insurance pricing
- emerging risks in the insurance industry
- Stochastic orderings of random variables
- Reliability theory

Publications in journals

- Rostami Noroozabad, M., Badami, M., & Esna-Ashari, M. (2023). Dimensions of Risk Management Development in the Business Model and Culture of Financial Industry Organizations in Iran. *Journal of Asset Management and Financing*, <https://doi.org/10.22108/amf.2022.134365.1749>, 47-78.
- Esna-Ashari, M., Balakrishnan, N., & Alimohammadi, M. (2023). HR and RHR orderings of generalized order statistics. *Metrika*, 86(1), 131-148.
- Alimohammadi, M., Esna-Ashari, M., & Navarro, J. (2023). Likelihood ratio comparisons and logconvexity properties of p-spacings from generalized order statistics. *Probability in the Engineering and Informational Sciences*, 37(1), 86-105.
- Khamesian, F., Esna-Ashari, M., Ofosu-Hene, D., & Khanizadeh, F. (2022). Risk Classification of Imbalanced Data for Car Insurance Companies: Machine Learning Approaches. *International Journal of Mathematical Modelling & Computations*, 12(3 (SUMMER)).
- Khanizadeh, F., Khamesian, F., & Esna-Ashari, M. (2022). Employing unsupervised learning to detect fraudulent claims in auto insurance (isolation forest). *Management Accounting*, 15(53), 141-153.
- Esna-Ashari, M., Khamesian, F., & Khanizadeh, F. (2022). Using local outlier factor to detect fraudulent claims in auto insurance. *Journal of Mathematics and Modeling in Finance*, 2(1), 167-182.
- Esna-Ashari, M., Alimohammadi, M., & Cramer, E. (2022). Some new results on likelihood ratio ordering and aging properties of generalized order statistics. *Communications in Statistics-Theory and Methods*, 51(14), 4667-4691.
- Khanizadeh, F., Esna-Ashari, M., Khamesian, F., & Bahador, A. (2022). Target replacement, a new approach to increase the performance of fraud detection system in auto insurance utilizing supervising learning. *Journal of Quality Engineering and Management*, 11(4).

- Alimohammadi, M., Esna-Ashari, M., & Cramer, E. (2021). On dispersive and star orderings of random variables and order statistics. *Statistics & Probability Letters*, 170, 109014.
- Esna-Ashari, M., & Asadi, M. (2016). On additive-multiplicative hazards model. *Statistics*, 50(6), 1421-1433.
- Navarro, J., Esna-Ashari, M., Asadi, M., & Sarabia, J. M. (2015). Bivariate distributions with conditionals satisfying the proportional generalized odds rate model. *Metrika*, 78, 691-709.

Publications in Proceedings

- Esnaashari, M. (2020). Emerging risks and their management, Proceedings of the 27th Conference of Insurance and Development.
- Esnaashari, M., Malekian, L., (2021). Pricing of property and liability insurances: Auto insurance, Proceedings of the 26th Conference of Insurance and Development.
- Esnaashari, M., Alimohammadi, M. (2022). Comparing of sequential $(n-k+1)$ -out-of- n systems with different structures, *Proceedings of the 8th Seminar on Reliability Theory and its Applications*, 70-79.
- Esnaashari, M., Alimohammadi, M. (2021). Some reliability properties of sequential $(n-r+1)$ -out-of- n systems, *Proceedings of the 7th Seminar on Reliability Theory and its Applications*, 101-113.
- Esnaashari, M., Asadi, M. (2015). On Additive-Multiplicative Hazards Model, *Proceedings of the 1th Seminar on Reliability Theory and its Applications*, 70-77.
- Esnaashari, M., Asadi, M. (2014). Reliability properties of bivariate conditional proportional generalized odds models, *Proceedings of the 12th Iranian Statistical Conference*, 62-69.

- Alimohammadi, M., Esnaashari, M., Alamatsaz, M.H. (2012). Some results for discrete strong unimodality of order statistics with applications, *Proceedings of the 11th Iranian Statistical Conference*, 50-57.

Research projects and reports

- Analysis of Iran's insurance market. (2016). Insurance Research center, Tehran, Iran.
- Insurance securities with the approach of Iran's insurance market needs. (2017). Insurance Research center, Tehran, Iran.
- Report on the dimensions of risk management development in the business model and culture of financial industry organizations. (2023). Insurance Research center, Tehran, Iran.
- Corona and risk change in the insurance industry. (2022). Insurance Research center, Tehran, Iran.
- Emerging risks and their management. (2023). Insurance Research center, Tehran, Iran.

Books

- Translation from English to Persian:
Imbalanced classification with python.

Membership in committees and working groups

- Scientific Committee of Insurance and Development Conference, Insurance Research Center, 2020-present
- Publication Commission, Insurance Research Center, 2019-present
- Research Council, Insurance Research Center, 2019-present