Research Papers Published by
Dr. Aliakbar Montazer Haghighi, Professor

1. Refereed Research Papers Published//Accepted/In Publishing Process	
1	**Aliakbar Montazer Haghighi**, and Dimitar P. Mishev (Accepted 2025). A Novel Time-Dependent Tandem Transportation Model with Bulk Arrivals of Various Sizes, Parallel Multi-Servers, Balking, Reneging and Feedback, Int. J. Mathematics in Operational Research (IJMOR).
2	N. Micheal Mathavavisakan, K. Indhira, and **Aliakbar Montazer Haghighi** (Accepted 2025). Swarm based Heuristic Optimization of the Recurrent Customers and Standby Server Under General Retrial Times, International Journal of Mathematical, Engineering and Management Sciences (IJMEMS).
3	**Aliakbar Montazer Haghighi** and Dimitar P. Mishev (being revised 2025). A Time-dependent Tandem BMAP with Batch and Possible Breakdown Service, Queueing Models and Service Management (QMSM).
4	**Aliakbar Montazer Haghighi**, and Dimitar P. Mishev (2025). A Transient $M^{[X]}/M^{(k,K)}/1$ Queue with Reneging and Setup Time for Service, Int. J. Mathematics in Operational Research, V31 N2 2025, will appear in June 2025.
5	Amal Kumar Adak[1,*], Manish Kumar Gunjan[2], **Aliakbar Montazer Haghighi**[3] (2024). Distance Measure of Picture Fuzzy Sets and Its Application in Multi-Criteria Decision Making Problem, J. Fuzzy. Ext. Appl. Vol. 5, No. 4 (2024) 594–604, www.journal-fea.com.
6	**Aliakbar Montazer Haghighi** and Sri Gopal Mohanty (2019). In Honor and Memory of Professor Emeritus Lajos Takács, Book Series: Developments in Mathematics, Editors: George E. Andrews, Christian Krattenthaler, and Alan Krinik, Springer International Publishing, Print ISBN: 978-3-030-11101-4, Electronic ISBN: 978-3-030-11102-1 Lattice Path Combinatorics and Applications https://link.springer.com/book/10.1007%2F978-3-030-11102-1
7	**Aliakbar Montazer Haghighi**, and Dimitar P. Mishev, Stepwise Explicit Solution for the Joint Distribution of Queue Length of a *MAP* Single-server Service Queueing System with Splitting and varying Batch Size Delayed-Feedback, Int. J. Mathematics in Operational Research, Vol. 9, No. 1, 2016, pp. 39-64. https://scholar.google.com/citations?view_op=view_citation&hl=en&user=XuQlZEAAAAAJ&citation_for_view=XuQlZEAAAAAJ:NaGl4SEjCO4C
8	**Aliakbar Montazer Haghighi**, and Dimitar P. Mishev, Busy period of a single-server Poisson queueing system with splitting and batch delayed-feedback, Int. J. Mathematics in Operational Research, Vol. 8, No. 2, 2016, pp. 239-257. https://www.inderscienceonline.com/doi/abs/10.1504/IJMOR.2016.074859

9	Aliakbar Montazer Haghighi, **Preface, In Honor and Memory of Professor Emeritus Lajos Takács, Applications and Applied Mathematics: An International Journal (AAM), Vol. 10, Issue 2 (December 2015), pp. 634-666.**
10	**Aliakbar Montazer Haghighi**, and Dimitar P. Mishev, *Stochastic Three-stage Hiring Model as a Tandem Queueing Process with Bulk Arrivals and Erlang Phase-Type Selection,* $M^X/M^{(k,K)}/1 - M^Y/E_r/1 - \infty$, International Journal of Mathematics in Operations Research (IJMOR), Vol. 5, No. 5, 2013. http://www.inderscience.com/jhome.php?jcode=ijmor
11	**Shayib, Mohammed and Aliakbar Montazer Haghighi,** *Moments of the Reliability, R = P(Y<X), as a Random Variable*, International Journal of Computational Engineering Research (IJCER), Vol. 3, Issue 8 (August 2013). http://www.ijceronline.com/v3i8.html
12	**Aliakbar Montazer Haghighi,** Stefanka Chukova and Dimitar P. Mishev, *Single-Server Poisson queueing system with delayed-feedback: Part 1,* International Journal Mathematics in Operational Research (IJMOR), Vol. 3, No. 1, 2011 http://inderscience.metapress.com/content/pu62l103040787h8/?p=6b728733e9ee41849d61a6fde8bb9dac&pi=0
13	Mohammed A. Shayib and **Aliakbar Montazer Haghighi**, *An Estimation of Reliability: Case of One-Parameter Burr Type X Distribution*. International Journal of Statistics and Economics, Vol. 6, No. S11, Spring 2011. http://www.ceser.in/ceserp/index.php/bse/article/view/863
14	**Aliakbar Montazer Haghighi,** and Mohammed A. Shayib, *Reliability computation using logistic and Extreme-Value Distributions*. International Journal of Statistics and Economics, Vol. 4, No. S10, Spring 2010. http://www.ceser.in/ceserp/index.php/bse/article/view/863.
15	**Aliakbar Montazer Haghighi**, and Mohammed A. Shayib, *Shrinkage Estimators for Calculating Reliability, Weibull Case.* Journal of Applied Statistical Science (JASS), Vol. 17, No. 2, 2008 (online), 2010 (paper). https://www.novapublishers.com/catalog/product_info.php?products_id=12874.
16	**Aliakbar Montazer Haghighi**, and Dimitar P. Mishev, *Analysis of a Two-node Task-Splitting Feedback Tandem Queue with Infinite Buffers by Functional Equation*, International Journal of Mathematics in Operations Research, Vol. 1, No. 1/2, 2009. http://www.inderscience.com/info/inarticletoc.php?jcode=ijmor&year=2009&vol=1&issue=1/2.
17	**Aliakbar Montazer Haghighi**, Stefanka Chukova, and Dimitar P. Mishev, *A Two Station Tandem Queueing System with Delayed-Service*. International Journal of Operational Research, Vol. 3, No. 4, 2008. http://www.inderscience.com/info/inarticletoc.php?jcode=ijor&year=2008&vol=3&issue=4.
18	**Aliakbar Montazer Haghighi**, Stefanka Chukova, and Dimitar P. Mishev, *Busy Period of a Delayed-Service Single-Server Poisson Queue*. American Institute of Physics (AIP), http://www.aip.org, Conference Proceedings, Volume 946, online October 18, 2007. Applications of Mathematics in Engineering and Economics, 33rd International Conference, Sozopol (Bulgaria), 8–14 June 2007. ISBN: 978-0-7354-0460-1. Editor: Michail D. Todorov, Technical University of Sofia.
19	**Aliakbar Montazer Haghighi**, and Dimitar P. Mishev, *A Tandem Queueing System with Task-Splitting, Feedback and Blocking*. International Journal of Operational Research (IJOR) Vol.2 No. 2, pp. 208 – 230, 2007. http://www.inderscience.com/info/inarticletoc.php?jcode=ijor&year=2007&vol=2&issue=2.
20	**Aliakbar Montazer Haghighi**, Roozbeh Vakil and Johnson Wetiba, *An Alternative Method of Teaching: Reverse-Traditional/Hands-On.* Applications and Applied Mathematics: An International Journal (AAM), Online, Vol. 1, No. 1, pp. 62 – 82, June 2006. *http://www.pvamu.edu/aam*.
21	**Aliakbar Montazer Haghighi**, and Dimitar P. Mishev, *A Parallel Priority Queueing System with Finite Buffers*. Journal of Parallel and Distributed Computing, 66, pp. 379-392, 2006. http://www.sciencedirect.com/science/journal/07437315/66/3.
22	Anastasia Ivanova, **Aliakbar Montazer-Haghighi**, Sri Gopal Mohanty, and Steven D. Durham, *Improved up-and-down designs for phase I trials*. Statistics in Medicine, 22, No. 1, pp. 69-82, 2003. http://onlinelibrary.wiley.com/doi/10.1002/sim.v22:1/issuetoc.
23	**Aliakbar Montazer Haghighi**, *An Analysis of a Parallel Multi-Processor System with Task Split and Feedback.* Computers Ops. Res. Vol. 25, No. 11, pp. 948 – 956, 1998. http://www.sciencedirect.com/science/journal/03050548/25/11
24	**Aliakbar Montazer Haghighi**, Robert Trueblood: *Busy Period Analysis of a Parallel Multi-Processor System with Task Split and Feedback.* The Advances In System Science and Applications (ASSA), Special Issue, 1997.

25	Stephen D. Durham, Nancy Flournoy, **Ali A. Montazer Haghighi**, *Up-and-Down Designs II.: Exact Treatment Moments.* Adaptive Designs (South Hadley, MA, 1992), Institute of Mathematical Statistics Lecture Notes Monograph Series, 25, pp. 158-178, 1995.
26	Stephen D. Durham, Nancy Flournoy, **Ali A. Montazer Haghighi**, *Up-and-Down Designs.* Computing and Statistics: Interface, Vol. 25, pp. 375-384, 1993.
27	S. G. Mohanty, **A. Montazer Haghighi** and R. Trueblood, *On the Transient Behavior of a Finite Birth-Death Process with an Application.* Computers and Ops. Res. Vol. 20, No. 3, pp. 239-248, 1993.
28	**A. Montazer Haghighi**, J. Medhi, and S. G. Mohanty, *On a Multi-Server Markovian Queueing System with Balking and Reneging.* Computers. and Ops. Res. Vol. 13, pp. 421-425, 1986.
29	**A. Montazer Haghighi**, *An M/M/2 Queueing System with Feedback,* Bulletin of Iranian Mathematical Society, Vol. 13, No. I & 2 (serial No. 21). pp. II -27, 1986.
30	**A. Montazer Haghighi**, *A Many-Server Queueing System with Feedback,* Bulletin of Iranian Mathematical Society, Vol. 9, No. I (serial No. 16), pp. 65-74, 1981.
31	**A. Montazer-Haghighi**, *Many-Server Queueing System with Feedback,* Proc. of the 8th National Mathematics Conference, Aryamehr University of Technology, Tehran, Iran, 1977.
32	**A. Montazer-Haghighi**, *A necessary and sufficient condition for a square matrix to have an infinite number of square roots.* English translation from the Persian, Research Bulletin, No. 3, Institute of Statistics and Informatics, Tehran, Iran, 1972.

2. Non-Refereed Research Papers Published

1	**Aliakbar Montazer Haghighi**, and Dimitar P. Mishev, "*A Two-Station Tandem Queueing System with Task-Splitting, Feedback, and Blocking*" Proceeding of the 30th International Summer School of Applications of Mathematics in Engineering and Economics (AMEE), June 7 – 12, 2004, Sozopol, Bulgaria.
2	**Aliakbar Montazer Haghighi**, and Dimitar P. Mishev, "*An Ordered Entry Queueing System*" Proceeding of the 29th International Summer School of Applications of Mathematics in Engineering and Economics (AMEE), June 9 – 14, 2003, Sozopol, Bulgaria.
3	S. Durham, **Aliakbar Montazer Haghighi** and R. Trueblood, *A Queueing Network for a Two Processor System with Task-Split and Feedback,* Proceedings of the Twentieth Annual Pittsburgh Conference on Modeling and Simulation, Modeling and Simulation, Vol. 20, part 3, Computer Architecture and Network, pp. 1189-1193, 1989.

3. Abstracts Published

1	**Aliakbar Montazer Haghighi**, Single-Processor, Exponential General Bulk Processing [$M/M(k, K)/1$] and Splitting Queueing System: A Mathematical Model for a Personnel Hiring Process. Abstracts, AMS Annual Joint Meeting, New Orleans, Louisiana, Special Session (Meeting # 1067): Math modeling in Environment and Economics I (# 49 A). January 6 – 9, 2011.
2	**Aliakbar Montazer Haghighi**, Dimitar Mishev, Stefanka Chukova, A Single-Server Poisson Queueing System with Splitting and Delayed Batched Feedback (Case $k = N = 1$). The Joint Meeting of AMS, SIAM and MAA, Washington, DC, January 5-8, 2009. 1046-60-833.
3	**Aliakbar Montazer Haghighi**, Mohammed Shayib, Estimating reliability and Comparing its Estimators, 301761, JSM, August 3 – 7, 2008, Denver, Colorado.
4	**Aliakbar Montazer Haghighi**, Dimitar Mishev**,** An Infinite-Buffers Tandem Queuing System. 2008 SIAM Annual meeting, July 7-11, 2008. CP17.
5	**Aliakbar Montazer Haghighi**, Mohammed Shayib, Preferred Distribution for Estimating $P(Y < X)$, JSM, July 29 – August 2, 2007, Salt Lake City, Utah.
6	**Aliakbar Montazer Haghighi**, Dimitar Mishev, Stefanka Chukova**,** Delayed-Service $M/M/c$ Queuing System. The Joint Meeting of AMS, SIAM and MAA, New Orleans, LA, January 5-8, 2007.
7	**Aliakbar Montazer Haghighi**, Roozbeh Vakil, and Johnson Wetiba, extended abstract of the manuscripts of: "An Alternative Method of Teaching" in the proceedings of the 1st International Scientifically-Practical Conference of the Informatization of Society. October 2004, Eurasian National University, Kazakhstan.
8	**Aliakbar Montazer Haghighi, Dimitar Mishev,** abstract of the manuscripts of: "Analysis of a Conveyor Model Viewed as a Priority Queueing System with Finite Buffer" in the AMS VI Joint International Meeting, May 13 – 15, 2004, Houston, TX.

9	**Aliakbar Montazer Haghighi, Dimitar Mishev**, abstract of the manuscripts of: "An *Ordered-Entry Queueing System*", Proceedings of the 29th International Summer School, [Application of Mathematics in Engineering and Economics](#), June 2003, Sozopol, Bulgaria.
10	**Aliakbar Montazer Haghighi**, abstract of the manuscripts of: "*An Alternative Method of Teaching: Reverse-Traditional/Hands-On: A Success*". American Mathematical Society, Vol. 22, No. 1, Issue 123, p. 200, # 962-E1-345, ISBN # 0192-5857, 2001.
11	**Aliakbar Montazer-Haghighi**, Sri Gopal Mohanty, and Steven D. Durham, abstract of the manuscripts of: "*Historical Up-and-Down Design in Quantile Estimation*". Final Program and Abstracts, 2001 SIAM (Society for Industrial and Applied Mathematics) Annual Meeting, # CP4, pp. 128-129, July 9 - 13, 2001.
12	**A. Montazer Haghighi**, *A Transient Up-and-Down Design: A Parameter Estimation*. Bulletin of the South Carolina Academy of Science, Vol. LX, p. 81, 1998.
13	**A. Montazer Haghighi**, *Calculus Excellence workshop Report: A Case Study*. Bulletin of the South Carolina Academy of Science, Vol. LIVII, p. 125, 1996.
14	**A. Montazer Haghighi**, *Time Dependence of A Multi-Server Queueing System with Balking and Reneging*. Bulletin of the South Carolina Academy of Science, Vol. LI, p. 65, 1989.
15	**A. Montazer-Haghighi**, *A Conveyor Problem with Balking and Reneging*. Bulletin of the South Carolina Academy of Science, Vol. XLX, p. 110, 1988.
16	**A. Montazer Haghighi**, *Batch-Service Multi-Server Markovian Queueing System with Balking and Reneging*. Bulletin of the South Carolina Academy of Science, Vol. XLIX, p. 85, 1987.