

# Dr. Ghous Ali

## HEC Approved Ph.D. Supervisor

#### BRIEF BIOGRAPHY

Ghous Ali has received M.Phil. and Ph.D. degrees in Fuzzy Mathematics from CUI, Lahore Campus and Punjab University, Lahore, Pakistan, respectively. He is currently an Assistant Professor in the Department of Mathematics at the University of Education, Lahore, Faisalabad Campus. Dr. Ali's research interests include fuzzy decision support systems and parameter reduction techniques for hybrid-soft-set models. He has published 41 research articles in international scientific journals. Some of his papers have been published in high impact journals, including Neural Computing and Applications, Applied Soft Computing, Engineering Applications of Artificial Intelligence and Artificial Intelligence Review. Dr. Ali's total impact factor is more than 160. His current H-index on Google scholar is 19 and i10-index is 24. He is an Editorial Member of two international academic journals named Mathematical Problems in Engineering and Journal of Mathematics. Reviewer/Referee for 30 International Journals, including Artificial Intelligence Review, Applied Soft Computing, IEEE Access, etc. Currently, he is supervising 3 M.Phil students.

## RESEARCH PROFILE

• Number of International/HEC recognized Journal publications	41
• Total impact factor	164.5
<ul> <li>Number of International Book Chapters</li> </ul>	01
• H–index	19
• i10-index	25
<ul> <li>Number of Foreign Research Collaborators</li> </ul>	17
<ul> <li>Number of National Research Collaborators</li> </ul>	21
• Reviewer/Referee for International Journals, including Artificial	
Intelligence Review, Applied Soft Computing, Engineering	30
Applications of Artificial Intelligence	
<ul> <li>Editorial Board Member of impact factor journals</li> </ul>	01

#### EDUCATION

#### First class throughout academic career.

2016 – 2019 Ph.D. Mathematics, University of Punjab, Lahore.

- 2014 2016 M. Phil Mathematics, CUI, Lahore.
- 2010 2014 BS. Mathematics, GCU, Faisalabad.
- 2007 2009 F.Sc Pre-Engineering, Pakistan College of Science and Commerce, Faisalabad.
- 2005 2007 **Matriculation in Science**, *Govt. Crescent Model Higher Secondary School*, Faisalabad.

#### PROFESSIONAL EXPERIENCES

4Sep.2020 – Assistant Professor, University of Education, Faisalabad. Present
1Mar.2020 – Visiting Assistant Professor, Riphah International University, Faisalabad. 25Jul.2020
22Apr.2020 – Visiting Assistant Professor, National Textile University, Faisalabad. 31Aug.2020
17Jan.2020 – CTI, Government Postgraduate Islamia College, Faisalabad. 31May.2020
13Nov.2017 – Visiting Lecture, University of Punjab, Lahore. 8Mar.2018

#### AWARDS

- HEC Indigenous Ph.D. Fellowship for 5000 Scholars, Phase-II, Batch-IV.
- Achieved Rs. 204,300 research incentive award from UE Lahore for Year 2021.

## TEACHING INTERESTS

I am teaching following modules:

- Discrete Mathematics
- Real Analysis
- Set Theory
- Group Theory
- Linear Algebra
- Graph Theory
- Fuzzy set theory

#### RESEARCH INTERESTS

- Fuzzy Sets
- Rough Sets
- Soft Sets

- Fuzzy Graph Theory
- Parameter Reduction of Soft Sets
- Fuzzy Group Theory
- Multi-Criteria Decision-Making Methods
- Hybrid-Soft Set Models
- Aggregation Operators

## INTERNATIONAL BOOK CHAPTERS

 Ghous Ali and Muhammad Akram, Group Decision-Making Analysis Under Interval-Valued q-rung Orthopair Fuzzy Soft Expert Sets. In: Sahoo, L., Senapati, T., Yager, R.R. (eds) Real Life Applications of Multiple Criteria Decision Making Techniques in Fuzzy Domain. Studies in Fuzziness and Soft Computing, 420(2023), Springer, Singapore.

## PUBLICATIONS

- 41. Musavarah Sarwar, Ghous Ali, Sundas Shahzadi and Liming Xiao, Dual interval rough integrated cloud COPRAS method: a novel hybrid assessment model for remanufacturing system selection, Soft Computing, https://doi.org/10.1007/s00500-023-09327-x. (I.F 4.1)
- 40. Ghous Ali, Ayesha Afzal, Umber Sheikh and Muhammad Nabeel, Multi-Criteria Group Decision-Making based on the combination of dual hesitant fuzzy sets with soft expert sets for the prediction of a local election scenario, Granular Computing, 8(2023), 2039-2066. (I.F 5.5)
- Adeel Farooq, Muhammad Nabeel and Ghous Ali, New MCDM applications using cubic bipolar fuzzy model in medicine and engineering, Soft Computing, https://doi.org/10.1007/s00500-023-09256-9. (I.F 4.1)
- 38. Ghous Ali, Novel MCDM methods and similarity measures for extended fuzzy parameterized possibility fuzzy soft information with their applications, Journal of Mathematics, 2023, Article ID 5035347, 33 pages, https://doi.org/10.1155/2023/5035347. (I.F 1.4)
- 37. Ghous Ali, Musavarah Sarwar, and Muhammad Nabeel, Novel group decision-making method based on interval-valued *m*-polar fuzzy soft expert information, Neural Computing and Applications, 2023, https://doi.org/10.1007/s00521-023-08869-3. (I.F 6.0)
- 36. Muhammad Akram, Ghous Ali, and José Carlos R. Alcantud, A new method of multi-attribute group decision making based on hesitant fuzzy soft expert information, Expert Systems, 2023, DOI: 10.1111/exsy.13357. (I.F 3.3)
- 35. Musavarah Sarwar, Ghous Ali, and Nauman Riaz, Decision-making model for failure modes and effect analysis based on rough fuzzy integrated clouds, Applied Soft Computing, 2023, DOI: 10.1016/j.asoc.2023.110148. (I.F 8.7)
- 34. Muhammad Akram, Ghous Ali, and José Carlos R. Alcantud, A novel group decision-making framework under Pythagorean fuzzy *N*-soft expert knowledge, Engineering Applications of Artificial Intelligence, 120(2023), 105879. (I.F 8.0)

- 33. Ghous Ali, Adeel Farooq and Mohammad M. Ali Al-Shamiri, Novel multiple criteria decisionmaking analysis under m-polar fuzzy aggregation operators with application. Mathematical Biosciences and Engineering, 20(2)(2023), 3566-3593. (I.F 2.6)
- 32. Mohammad M. Ali Al-Shamiri, Adeel Farooq, Muhammad Nabeel, Ghous Ali and Dragan Pamucar, Integrating TOPSIS and ELECTRE-I methods with cubic m-polar fuzzy sets and its application to the diagnosis of psychiatric disorders, AIMS Mathematics, 8(5)(2023), 11875-11915. (I.F 2.2)
- 31. Mohammad M. Ali Al-Shamiri, Ghous Ali, Muhammad Zain UI Abidin and Arooj Adeel, Multiattribute group decision-making under spherical fuzzy bipolar soft expert framework with its application, Computer Modeling in Engineering and Sciences, 2023. https://doi.org/10.32604/c mes.2023.027844. (I.F 2.4)
- Ghous Ali, Muhammad Zain Ul Abidin, Qin Xin, and Ferdous M. O. Tawfiq, An innovative hybrid multi-criteria decision-making approach under picture fuzzy information, Symmetry, 14(11)(2022), 2434. (I.F 2.7)
- 29. Ghous Ali, Muhammad Zain Ul Abidin, Qin Xin, and Ferdous M. O. Tawfiq, Ranking of downstream fish passage designs for a hydroelectric project under spherical fuzzy bipolar soft framework, Symmetry, 14(2022), 2141. (I.F 2.7)
- Muhammad Akram, Ghous Ali, Xindong Peng, and Muhammad Zain UI Abidin, Hybrid group decision-making technique under spherical fuzzy N-soft expert sets, Artificial Intelligence Review, 55(2022), 4117-4163. (I.F 12)
- Muhammad Akram, Ghous Ali, José Carlos R. Alcantud, and Aneesa Riaz, Group decision-making with Fermatean fuzzy soft expert knowledge, Artificial Intelligence Review, 55(2022), 5349-5389. (I.F 12)
- Ghous Ali, Muhammad Afzal, Muhammad Asif, and Adeel Shazad, Attribute reduction approaches under interval-valued q-rung orthopair fuzzy soft framework, Applied Intelligence, 52(2022), 8975-9000. (I.F 5.3)
- 25. Muhammad Akram, Ghous Ali, and José Carlos R. Alcantud, Attributes reduction algorithms for m-polar fuzzy relation decision systems, International Journal of Approximate Reasoning, 140(2022), 232-254. (I.F 3.9)
- 24. Ghous Ali and Musavarah Sarwar, Novel technique for group decision-making under fuzzy parameterized q-rung orthopair fuzzy soft expert framework, Mathematical Problems in Engineering, 2021(2021), Article ID 5449403.
- Muhammad Asif, Doha A. Kattan, Dragon Pamucar and, Ghous Ali, q-Rung Orthopair Fuzzy Matroids with Application to Human Trafficking, Discrete Dynamics in Nature and Society, 2021(2021), Article ID 8261118. (I.F 1.4)
- Fairouz Tchier, Ghous Ali, Muhammad Gulzar, Dragan Pamucar, and Ganesh Ghorai, A new group decision-making technique under picture fuzzy soft expert information, Entropy, 23(9)(2021), 1176. (I.F 2.7)
- Muhammad Akram, Ghous Ali, and José Carlos R. Alcantud, Parameter reduction analysis under interval-valued m-polar fuzzy soft information, Artifcial Intelligence Review, 54(2021), 5541-5582. (I.F 12)

- Muhammad Akram, Ghous Ali, Muhammad Arif Butt, and José Carlos R. Alcantud, Novel MCGDM analysis under m-polar fuzzy soft expert sets, Neural Computing and Applications, 33(2021), 12051-12071. (I.F 6.0)
- Ghous Ali, Hanan Alolaiyan, Dragan Pamučar, Muhammad Asif, and Nimra Lateef, A novel MADM framework under q-rung orthopair fuzzy bipolar soft sets, Mathematics, 9(17)(2021), 2163. (I.F 2.4)
- Ghous Ali, Muhammad Akram, Sundus Shahzadi and, Muhammad Zain UI Abidin, Group decisionmaking framework with bipolar soft expert sets, Journal of Multiple-Valued Logic and Soft Computing, 37(3-4)(2021), 211-246. (I.F 1.3)
- 17. Ghous Ali, G. Muhiuddin, Arooj Adeel, and Muhammad Zain UI Abidin, Ranking effectiveness of COVID-19 tests using fuzzy bipolar soft expert sets, Mathematical Problems in Engineering, 2021(2021), Article ID 5874216.
- 16. Ghous Ali and Masfa Nasrullah Ansari, Multiattribute decision-making under Fermatean fuzzy bipolar soft framework, Granular Computing, 7(2022), 337-352. (I.F 5.5)
- Ghous Ali, Muhammad Akram, and Ali N. A. Koam, José Carlos R. Alcantud, Parameter reductions of bipolar fuzzy soft sets with their decision-making algorithms, Symmetry, 11(8) (2019), 949. (I.F 2.7)
- Ghous Ali, Muhammad Akram, and José Carlos R. Alcantud, Attributes reductions of bipolar fuzzy relation decision systems, Neural Computing and Applications, 32(2020), 10051–10071. (I.F 6.0)
- 13. Ghous Ali and Muhammad Akram, Decision-making method based on fuzzy N-soft expert sets. Arabian Journal for Science and Engineering, 45(12)(2020), 10381-10400. (I.F 2.9)
- Muhammad Akram, Ghous Ali, José Carlos R. Alcantud, and Fatia Fatimah, Parameter reductions in N-soft sets and their applications in decision-making. Expert Systems, 38(1)(2021), e12601. (I.F 3.3)
- 11. Muhammad Akram, Ghous Ali, and José Carlos R. Alcantud, New decision-making hybrid model: intuitionistic fuzzy N-soft rough sets, Soft Computing, 23(2019), 9853–9868. (I.F 4.1)
- 10. Muhammad Akram, Ghous Ali, and Noura Omair Alshehri, A new multi-attribute decision-making method based on m-polar fuzzy soft rough sets, Symmetry, 9(11)(2017), 271. (I.F 2.7)
- Muhammad Akram, Ghous Ali, and José Carlos R. Alcantud, Hybrid multi-attribute decisionmaking model based on (m,N)-soft rough sets, Journal of Intelligent and Fuzzy Systems, 36(6)(2019), 6325-6342. (I.F 2.0)
- Muhammad Akram, Ghous Ali, Neha Waseem, and Bijan Davvaz, Decision-making methods based on hybrid mF models, Journal of Intelligent and Fuzzy Systems, 35(3)(2018), 3387-3403. (I.F 2.0)
- 7. Muhammad Asif, Muhammad Akram, and Ghous Ali, Pythagorean fuzzy matroids with application, Symmetry, 12(3)(2020), 423; doi:10.3390/sym12030423. (I.F 2.7)

- Muhammad Akram, Naveed Yaqoob, Ghous Ali, and Wathek Chammam, Extensions of Dombi aggregation operators for decision making under m-polar fuzzy information, Journal of Mathematics, 2020(2020), Article ID 4739567, 20 pages. (I.F 1.4)
- 5. Muhammad Akram and Ghous Ali, Hybrid models for decision-making based on rough Pythagorean fuzzy bipolar soft information, Granular Computing, 5(2020), 1-15. (I.F 5.5)
- 4. Muhammad Akram and Ghous Ali, Group decision-making approach under multi (Q,N)-soft multi-granulation rough model, Granular Computing, 6(2021), 339-357. (I.F 5.5)
- 3. Muhammad Akram, Ghous Ali, and Muhammad Shabir, A hybrid decision-making framework using rough mF bipolar soft environment, Granular Computing, 6(2021), 539-555. (I.F 5.5)
- Usman Ali, Ghous Ali, and I. F. Hussain, Soft Independent Sets, International Journal of Algebra and Statistics, 8(1-2)(2019), 26–34.
- 1. Adeel Farooq, Ghous Ali, and Muhammad Akram, On m-Polar Fuzzy Groups, International Journal of Algebra and Statistics, 5(2)(2016), 115–127.

EDITORIAL BOARDS

- 1. Mathematical Problems in Engineering
- 2. Journal of Mathematics
- 3. Computational Intelligence and Neuroscience

#### REFEREEING AND REVIEWING

- 1. Soft Computing
- 2. Computational and Applied Mathematics
- 3. Artificial Intelligence Review
- 4. Journal of Intelligent and Fuzzy Systems
- 5. Fuzzy Information and Engineering
- 6. Symmetry
- 7. Mathematics
- 8. Applied Sciences
- 9. Agriculture
- 10. Mathematical Problems in Engineering
- 11. Journal of Mathematics
- 12. Advances in Fuzzy Systems
- 13. Scientific Reports

- 14. Financial Innovation
- 15. International Journal of Information Technology and Decision Making
- 16. Entropy
- 17. Applied Intelligence
- 18. Computational and Mathematical Methods in Medicine
- 19. IEEE Access
- 20. Journal of the Egyptian Mathematical Society
- 21. Heliyon
- 22. AIMS Mathematics
- 23. Journal of Function Spaces
- 24. Mathematical Biosciences and Engineering

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- 1. Jose Carlos R. Alcantud (Spain)
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