# Muhammad Danish Zia

Assistant Professor

Military College of Engineering

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## About

Dr. Muhammad Danish Zia is working as Assistant Professor in the Military College of Engineering. Dr. Muhammad Danish Zia has a PhD in Mathematics. Dr. Muhammad Danish Zia has published 14 research articles & conference papers having a citation count of 71, carried out 0 projects and filed 0 intellectual property.

## Qualifications

**PhD in Mathematics**                                                                                    2017 - 2021
  Lahore University of Management Sciences , Pakistan

**MPhil in Mathematics (Convex Analysis)**                                                2013 - 2015
  NUST, Islamabad , Pakistan

**MSc in Mathematics**                                                                                   2011 - 2013
  International Islamic University , Pakistan

**BSc in Double Maths, Stats**                                                                        2009 - 2011
  University of the Punjab , Pakistan

## Experience

**Assistant Professor**                                                                                   2021- Present
  Military College of Engineering

**Assistant Professor**                                                                                   2021 - 2021
  Military College of Engineering

**Lecturer**                                                                                                     2016 - 2021
  Military College of Engineering

**Senior Lecturer**                                                                                         2013 - 2015
  Civil College of Commerce and Management , S-174, Dhamial Road, Opp. Biscuit Factory, Rawalpindi

## Awards

**Gold Medal**                                                                                                 2016
  For securing 1st position in Master of Science in Mathematics

**President's Gold Medal**                                                                             2015
  For securing 1st position in Master of Philosophy in Mathematics

## Research Articles

**Analytical Periodic Solutions for Non-Homogenous Integrable Dispersionless Equations Using a Modified Harmonic Balance Method**                                                    2025
  *Muhammad Irfan khan Yiu-Yin Lee Muhammad Danish Zia*
  *Mathematics* , Volume:13, Issue:15, Article Number 2386
  **Impact Factor:** 2.200 | **Quartile:** 1
  **DOI:** https://doi.org/10.3390/math13152386

**Complex linear Diophantine fuzzy sets and their applications in multi-attribute decision making**                                                                                                   2024
  *Muhammad Danish Zia Faisal Yousafzai Saleem Abdullah Kostaq Hila*
  *Engineering Applications of Artificial Intelligence* , Volume 132, Article Number 107953
  **Impact Factor:** 8.00 | **Quartile:** 1 | **Citations:** 14
  **DOI:** https://doi.org/10.1016/j.engappai.2024.107953

**Perturbation determinant and Levinson's formula for Schrödinger operators with 1-D general point interaction**

2024

*M. Fazeel Anwar Muhammad Usman Muhammad Danish Zia*

*Analysis and Mathematical Physics*, Volume 14, Issue 3, Article Number 57

**Impact Factor:** 1.4 | **Quartile:** 1 | **Citations:** 1
**DOI:** 10.1007/s13324-024-00922-1

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**Mechanism of Improvement and Best-fit Models for the Prediction of Geotechnical Properties of Lime Stabilized Expansive Soil Used in Pavement Subgrade**

2024

*Muhammad Ali Naveed Sarfraz Ahmed Arshad Ullah Muhammad Danish Zia*

*Mehran University Research Journal of Engineering and Technology*, Volume 43(2), Pages 65-78

**Impact Factor:** 0.600 | **Quartile:** 3
**DOI:** https://doi.org/10.22581/muet1982.2977

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**Complex fuzzy intelligent decision modeling for optimizing economic sustainability in transportation sector**

2024

*Xiaoying Wang Muhammad Danish Zia Faisal Yousafzai Sarfraz Ahmed Muwen Wang*

*Complex & Intelligent Systems*, Pages 1-19

**Impact Factor:** 5.800 | **Quartile:** 2 | **Citations:** 2
**DOI:** https://doi.org/10.1007/s40747-024-01372-9

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**Linear Diophantine fuzzy sets over complex fuzzy information with applications in information theory☆**

2024

*Faisal Yousafzai Muhammad Danish Zia Murad-ul-Islam Khan Mohammed. M. Khalaf Rashad Ismail*

*Ain Shams Engineering Journal*, Volume 15, Issue 1, Article Number: 102327

**Impact Factor:** 6.0 | **Quartile:** 1 | **Citations:** 11
**DOI:** 10.1016/j.asej.2023.102327

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**A study of quadratic Diophantine fuzzy sets with structural properties and their application in face mask detection during COVID-19**

2023

*Muhammad Danish Zia Esmail Hassan Abdullatif Al-Sabri Faisal Yousafzai Murad-ul-Islam Khan Rashad Ismail Mohammed M. Khalaf*

*AIMS Mathematics*, Volume 8, Issue 6, Pages 14449-14474

**Impact Factor:** 2.739 | **Quartile:** 1 | **Citations:** 4
**DOI:** 10.3934/math.2023738

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**Applications of AG-Groupoids in Decision-Making via Linear Diophantine Fuzzy Sets**

2023

*Faisal Yousafzai Muhammad Danish Zia Mohammed M. Khalaf Esmail Hassan Abdullatif Al-Sabri Rashad Ismail*

*Discrete Dynamics in Nature and Society*, Volume 2023, Article ID 3411475

**Impact Factor:** 1.457 | **Quartile:** 3 | **Citations:** 6
**DOI:** https://doi.org/10.1155/2023/3411475

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**A new look of interval-valued intuitionistic fuzzy sets in ordered AG-groupoids with applications**

2022

*Faisal Yousafzai Muhammad Danish Zia Mohammed M. Khalaf Rashad Ismail*

*AIMS Mathematics*, Volume 8, Issue 3, Pages 6095-6118

**Impact Factor:** 2.739 | **Quartile:** 1 | **Citations:** 8
**DOI:** 10.3934/math.2023308

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**Complex Linear Diophantine Fuzzy Sets over AG-Groupoids with Applications in Civil Engineering**

2022

*Hao Guan Faisal Yousafzai Muhammad Danish Zia Murad-ul-Islam Khan Muhammad Irfan Kostaq Hila*

*Symmetry*, Volume 15(1), Article Number 74

**Impact Factor:** 2.7 | **Quartile:** 2 | **Citations:** 9
**DOI:** 10.3390/sym15010074

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**Experimental Analysis of Embankment on Soft Soil Improved with Bottom Ash Columns**

2022

*Arshad Ullah Azman Kassim Sarfraz Ahmed Rafi Ullah Muhammad Junaid Muhammad Danish Zia*

*Transportation Geotechnics*, Volume 37, Article Number 100881

**Impact Factor:** 4.938 | **Quartile:** 1 | **Citations:** 13
**DOI:** https://doi.org/10.1016/j.trgeo.2022.100881

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**A trace formula, perturbation determinant and Levinson's theorem for a class of star graphs**

2022

*Muhammad Usman Muhammad Danish Zia*

*European Physical Journal Plus*, Volume:137, Issue:6,

**Impact Factor:** 3.758 | **Quartile:** 2 | **Citations:** 1
**DOI:** https://doi.org/10.1140/epjp/s13360-022-02839-9

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**On Smallest (generalized) Ideals and Semilattices of (2,2)-regular Non-associative Ordered Semigroups**

2022

*Faisal Yousafzai Mohammed M. Khalaf Muhammad Danish Zia*

**Sharp Spectral Inequalities for Fourth Order Differential Operators on Semi-Axis**

*Muhammad Danish Zia Muhammad Usman*