Muhammad Irfan Zafar

Assistant Professor

School of Mechanical & Manufacturing Engineering

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About

Dr. Muhammad Irfan Zafar is working as Assistant Professor in the School of Mechanical & Manufacturing Engineering. Dr. Muhammad Irfan Zafar has a PhD in Fluid Dynamics. Dr. Muhammad Irfan Zafar has published 6 research articles & conference papers having a citation count of 80, carried out 1 projects and filed 0 intellectual property.

Qualifications

PhD in Fluid Dynamics   2019 - 2023
  Virginia Polytechnic Institute and State University (Virginia Tech) , United States

MS in Aeroelasticity   2011 - 2014
  Politecnico di Milano , Italy

Post Grad Diploma in NA   2007 - 2011
  Institute of Space Technology , Pakistan

Experience

Assistant Professor   2023- Present
  School of Mechanical & Manufacturing Engineering

Lecturer   2017 - 2019
  Institute of Space Technology , 1 Islamabad Expy, Islamabad

Lecturer   2015 - 2017
  Superior University, Lahore , 17km Raiwind Rd, Kot Araian, Lahore

Research Projects

National Projects

Design and Manufacturing of a VTOL QuadPlane with Foldable Arms   2025
  Funding Agency: N/A
  Amount: PKR 67,760.00
  Status: Completed

International Projects

Research Articles

Frame Invariance and Scalability of Neural Operators for Partial Differential Equations 2022

Muhammad I. Zafar Jiequn Han Xu-Hui Zhou Heng Xiao

Communications in Computational Physics, Volume 32, Issue 2, Pages 336-363

Impact Factor: 3.700 | **Quartile:** 1 | **Citations:** 4
DOI: 10.4208/cicp.OA-2021-0256

Recurrent neural network for end-to-end modeling of laminar-turbulent transition 2021

Meelan M. Choudhari Muhammad Irfan Zafar Pedro Paredes Heng Xiao

Data-Centric Engineering, Volume 2, Issue 11, Article Number e17

Impact Factor: N/A | **Citations:** 20
DOI: https://doi.org/10.1017/dce.2021.11

Convolutional neural network for transition modeling based on linear stability theory 2020

Muhammad I. Zafar Heng Xiao Meelan M. Choudhari Chau-Lyan Chang Pedro Paredes Balaji Venkatachari

Physical Review Fluids, Volume 5, Issue 11, Article Number 113903

Impact Factor: 2.537 | **Quartile:** 2 | **Citations:** 29
DOI: https://doi.org/10.1103/PhysRevFluids.5.113903

Toward a practical method for hypersonic transition prediction based on stability correlations 2020

Pedro Paredes Balaji Venkatachari Meelan M. Choudhari Fei Li Chau-Lyan Chang Muhammad Irfan Zafar Heng Xiao

AIAA Journal, Volume 58, Issue 10, Pages 4475-4484

Impact Factor: 2.127 | **Quartile:** 1 | **Citations:** 25
DOI: https://doi.org/10.2514/1.J059407

Multiple input describing function analysis of non-classical aileron buzz 2017

Muhammad I. Zafa Francesca Fus Giuseppe Quaranta

Advances in Aircraft and Spacecraft Science, Volume 4, Issue 2, Pages 203-218

Impact Factor: N/A | **Citations:** 2
DOI: 10.12989/aas.2017.4.2.203

Analysis of Non-Classical Aileron Buzz 2016

M. I. Zafar F. Fusi G. Quaranta

Aerotecnica Missili & Spazio, Volume 95, Pages 191-200

Impact Factor: 0
DOI: 10.1007/BF03404727

Editorial Activities

FLOW   2024
    Reviewed Papers for Journals
    Impact Factor: 2.8

N/A   2024
    Reviewed Papers for Journals
    Impact Factor: N/A

Communications in Computational Physics   2024
    Reviewed Papers for Journals
    Impact Factor: 2.6

N/A   2024
    Reviewed Papers for Journals
    Impact Factor: N/A

N/A   2024
    Reviewed Papers for Journals
    Impact Factor: N/A

N/A   2024
    Reviewed Papers for Journals
    Impact Factor: N/A

N/A   2024
    Reviewed Papers for Journals
    Impact Factor: N/A