Zafar Abbas Bangash

Assistant Professor

College of Electrical & Mechanical Engineering

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About

Dr. Zafar Abbas Bangash is working as Assistant Professor in the College of Electrical & Mechanical Engineering. Dr. Zafar Abbas Bangash has a PhD in Mechanical Engineering. Dr. Zafar Abbas Bangash has published 14 research articles & conference papers having a citation count of 302, carried out 3 projects and filed 0 intellectual property.

Qualifications

PhD in Mechanical Engineering 2010 - 2015
Universitat Rovira I Virgili Tarragona , Spain

MS in Aerospace Engineering 2000 - 2003
Auburn University , United States

BE in Aerospace Engineering 1992 - 1995
NUST, Islamabad , Pakistan

Experience

Assistant Professor 2024- Present
College of Electrical & Mechanical Engineering

Assistant Professor 2023 - 2023
College of Electrical & Mechanical Engineering

Assistant Professor 2017 - 2023
College of Electrical & Mechanical Engineering

TVF 2016 - 2016
Institute of Space Technology , 1 Islamabad Expressway, Islamabad

Structural Design Specialist 2008 - 2010
Mechatronix Pakistan , 169, Street 9, I-10/3 Islamabad

Research Projects

National Projects

Development of Smart Irrigatoin System with Weather Forecast (PETRA) 2020
Funding Agency: NCBC
Amount: PKR 14,920,000.00
Status: Completed

FEA Based shock and vibration analysis of cabinets consoles onboard surface 2017
Funding Agency: NESCOM
Amount: PKR 100,000.00
Status: Completed

Design and Fabrication of ICU grade and Emergency Ventilator 2021
Funding Agency: HEC TTSF
Amount: PKR 11,733,960.00
Status: Completed

International Projects

Research Articles

Insight into the significance of relative humidity on Nusselt number of crossflow heat exchangers with staggered elliptic tubes 2022

Arshan Ahmed Atta ul Mannan Hashmi Fahad Rafi Butt Zafar Bangash Shahbaz Ghani Imran Akhtar

Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, Pages 1-9

Impact Factor: 1.285 | **Quartile:** 4

DOI: https://doi.org/10.1177/09544100221135104

Neural Network-Based Model Reduction of Hydrodynamics Forces on an Airfoil 2021

Hamayun Farooq Ahmad Saeed Imran Akhtar Zafar Bangash

Fluids , Volume 6(9), Article Number 332

Impact Factor: N/A | **Citations:** 11

DOI: https://doi.org/10.3390/fluids6090332

Machine Learning based Reduced-Order Modeling of Hydrodynamic Forces using Pressure Mode Decomposition 2021

Imran Akhtar Hassan F Ahmed Hamayun Farooq Zafar Abbas Bangash

Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, Pages 1-12

Impact Factor: 1.285 | **Quartile:** 4 | **Citations:** 8

DOI: https://doi.org/10.1177/0954410021999864

Pressure Mode Decomposition Analysis of the Flow past a Cross-flow Oscillating Circular Cylinder 2021

Imran Akhtar Muhammad Sufyan Hamayun Farooq Zafar Abbas Bangash

Journal of Mechanical Science and Technology, Volume 35(1), Pages 153–158

Impact Factor: 1.810 | **Quartile:** 3 | **Citations:** 10

DOI: 10.1007/s12206-020-1214-0

Multi-mode vortex and wake-induced vibrations of a flexible cylinder in tandem arrangement 2016

Francisco Huera-Huarte Zafar Abbas Bangash Leo Miguel Gonzalez

Journal of Fluids and Structures, Volume 66, Pages 571-588

Impact Factor: 2.021 | **Quartile:** 2 | **Citations:** 73

DOI: 10.1016/j.jfluidstructs.2016.07.019

On the flow around the node to anti-node transition of a flexible cylinder undergoing vortex-induced vibrations 2015

Zafar Abbas Bangash Francisco Huera-Huarte

Physics of Fluids, Volume 27, Article Number 065112

Impact Factor: 2.017 | **Quartile:** 2 | **Citations:** 10

DOI: 10.1063/1.4922816

Towing Tank Experiments on the Vortex-Induced Vibrations of Low Mass Ratio Long Flexible Cylinders 2014

L.M. González F.J. Huera-Huarte Zafar Abbas Bangash

Journal of Fluids and Structures, Volume 48, Pages 81-92

Impact Factor: 2.021 | **Quartile:** 1 | **Citations:** 107

DOI: 10.1016/j.jfluidstructs.2014.02.006

Experimental Investigation of Axisymmetric Coaxial Synthetic Jets 2009

Zafar Abbas Bangash A. Ahmed

Experimental Thermal and Fluid Sciences, Volume 33, Issue 8, Pages 1142-1148

Impact Factor: 1.234 | **Quartile:** 1 | **Citations:** 15

DOI: 10.1016/j.expthermflusci.2009.07.003

Assessment of Continuous and Aerated Fabric Pressure-Washing 2007

G. Buschle-Diller A. Ahmed Y. Gowayed T. Turel R. Rifki Z. Bangash

The Journal of The Textile Institute, Volume 98, Issue 4, Pages 319-326

Impact Factor: 0

DOI: 10.1080/00405000701502842

Aerodynamics of Formation Flight 2006

Zafar A. Bangash R. P. Sanchez A. Ahmed M. J. Khan

Journal of Aircraft, Volume 43, Issue 4, Pages 907-912

Impact Factor: 0.456 | **Quartile:** 3 | **Citations:** 68

DOI: 10.2514/1.13872

Conference Proceedings

Deep learning-based reduced-order model for turbulent flows 2022

Ahmad Saeed Hamayun Farooq Imran Akhtar Zafar Bangash

2022 19th International Bhurban Conference on Applied Sciences and Technology (IBCAST), res.country(177,)

Citations: N/A

DOI: 10.1109/IBCAST54850.2022.9990530

Nusselt Number Dependence on Aspect Ratio and Rayleigh Number: A Numerical Study of Rayleigh-Benard Instability 2022

Wajeeha Siddiqui Zafar Bangash Imran Akhtar Muhammad Saif Ullah Khalid

ASME 2022 Fluids Engineering Division Summer Meeting, FEDSM 2022, res.country(38,)

Citations: N/A

DOI: 10.1115/FEDSM2022-87897

Application of Data-Driven and Physics-Embedded Neural Networks in Wake Dominated Flows 2021

Col. Dr. Imran Akhtar Zafar Bangash Hassan Farooq Faraz Kaiser Malik

2021 International Bhurban Conference on Applied Sciences and Technologies (IBCAST), res.country(177,)

Citations: N/A

DOI: 10.1109/IBCAST51254.2021.9393218

Robust Principal Component Analysis of Vortex-induced Vibrations using Particle Image Velocimetry Measurements 2021

Dr. Zafar Abbas Bangash Col. Dr. Imran Akhtar Ahmed Saeed Hassan Farooq

2021 International Bhurban Conference on Applied Sciences and Technologies, res.country(177,)

Citations: N/A

DOI: 10.1109/IBCAST51254.2021.9393277

Editorial Activities

2021

Reviewed Papers for Journals

Impact Factor: 2.84