

Abdullah Mughees

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About

Dr. Abdullah Mughees is working as Assistant Professor in the School of Electrical Engineering and Computer Science. Dr. Abdullah Mughees has a PhD in Electrical Engineering. Dr. Abdullah Mughees has published 15 research articles & conference papers having a citation count of 381, carried out 2 projects and filed 0 intellectual property.

Qualifications

PhD in Electrical Engineering NUST, Islamabad , Pakistan	2020 - 2024
MS in Control and Power FAST - National University of Computer and Emerging Sciences (NUCES) , Pakistan	2018 - 2020

Experience

Assistant Professor School of Electrical Engineering and Computer Science	2024- Present
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Research Projects

National Projects	
Funding Horizons: An Online Platform to Bridge the Gap Between Researchers and Funding Opportunities Funding Agency: Pakistan Science Foundation (PSF) Amount: PKR 100,000.00 Status: Approved_inprocess	
Multi-purpose drone system (Tethered and Free-Flight) Funding Agency: HQ FC Bln (S) and DRD Dte NUST Amount: PKR 4,365,000.00 Status: Approved_inprocess	2024

International Projects

Research Articles

Deep reinforcement learning-based control of wind energy conversion system integrated with superconducting magnetic energy storage Neelam Mughees Abdullah Mughees Anam Mughees Journal of Energy Storage, Volume:128, Article Number 117228 Impact Factor: 9.800 Quartile: 1 DOI: https://doi.org/10.1016/j.est.2025.117228	2025
Phasor particle swarm optimization-based control for Quadcopter systems: An event-triggered impulsive super twisting approach Ahsan Nawaz Jadoon Mohammad Nashit Shah Mujahid Nawaz Jadoon Abdullah Mughees Swarm and Evolutionary Computation, Volume:96, Article Number 101955 Impact Factor: N/A Quartile: 1 DOI: https://doi.org/10.1016/j.swevo.2025.101955	2025
Optimizing electrical and thermal energy storage systems for hour-ahead integrated demand response in industries Neelam Mughees Abdullah Mughees Anam Mughees Krzysztof Ejsmont Energy Reports, Volume:13, Pages 4441-4458 Impact Factor: 5.100 Quartile: 2	2025

DOI: https://doi.org/10.1016/j.egyr.2025.04.008	
Optimal novel nonlinear control law for attitude and heading control of a bi-copter system with controller-in-loop <i>Ahsan Nawaz Jadoon Abdullah Mughees Iftikhar Ahmad Hammad Iqbal Sherazi</i> <i>Expert Systems with Applications</i> , Volume:272, Article Number 126554 Impact Factor: 7.500 Quartile: 1 Citations: 2 DOI: https://doi.org/10.1016/j.eswa.2025.126554	2025
Third-Order Sliding Mode Control for Trajectory Tracking of Quadcopters Using Particle Swarm Optimization <i>Muhammad rizwan Chughtai Iftikhar Ahmad Abdullah Mughees Muddesar Iqbal Dhafer Almakhlles Mahmoud Abdelrahim</i> <i>Drones</i> , Volume:9, Issue:3, Article Number 172 Impact Factor: 4.400 Quartile: 1 Citations: 2 DOI: https://doi.org/10.3390/drones9030172	2025
Enhancing stability and position control of a constrained magnetic levitation system through optimal fractional-order PID controller <i>Abdullah Mughees Neelam Mughees Anam Mughees Syed Ali Mohsin Krzysztof Ejmont</i> <i>Alexandria Engineering Journal</i> , Volume 107, Pages 730-746 Impact Factor: 6.200 Quartile: 1 Citations: 7 DOI: https://doi.org/10.1016/j.aej.2024.09.022	2024
New Appliance Signatures for NILM Based on Mono-Fractal Features and Multi-Fractal Formalism <i>Anam Mughees Muhammad Kamran Neelam Mughees Abdullah Mughees Krzysztof Ejmont</i> <i>IEEE Access</i> , Volume 12, Pages 108986-109000 Impact Factor: 3.400 Quartile: 2 Citations: 1 DOI: 10.1109/ACCESS.2024.3440168	2024
Enhanced Nonlinear Control for Trajectory Tracking Control of a Quad-Copter System Using Redfox Algorithm <i>Abdullah Mughees Iftikhar Ahmad Ahsan Nawaz Jadoon</i> <i>IEEE Access</i> , Volume 12, Pages 86618-86630 Impact Factor: 3.400 Quartile: 2 Citations: 6 DOI: 10.1109/ACCESS.2024.3404825	2024
Conditioned adaptive barrier-based double integral super twisting SMC for trajectory tracking of a quadcopter and hardware in loop using IGWO algorithm <i>Abdullah Mughees Iftikhar Ahmad Neelam Mughees Anam Mughees</i> <i>Expert Systems with Applications</i> , Volume 235, Article Number 121141 Impact Factor: 7.500 Quartile: 1 Citations: 14 DOI: 10.1016/j.eswa.2023.121141	2024
Multi-Optimization of Novel Conditioned Adaptive Barrier Function Integral Terminal SMC for Trajectory Tracking of a Quadcopter System <i>Abdullah Mughees Iftikhar Ahmad</i> <i>IEEE Access</i> , Volume 11, Pages 88359-88377 Impact Factor: 3.9 Quartile: 2 Citations: 19 DOI: 10.1109/ACCESS.2023.3304760	2023
Reinforcement learning-based composite differential evolution for integrated demand response scheme in industrial microgrids <i>Neelam Mughees Mujtaba Hussain Jaffery Anam Mughees Ejaz Ahmad Ansari Abdullah Mughees</i> <i>Applied Energy</i> , Volume 342, 15 Article Number 121150 Impact Factor: 10.100 Quartile: 1 Citations: 24 DOI: https://doi.org/10.1016/j.apenergy.2023.121150	2023
Bi-LSTM-Based Deep Stacked Sequence-to-Sequence Autoencoder for Forecasting Solar Irradiation and Wind Speed <i>Neelam Mughees Mujtaba Hussain Jaffery Abdullah Mughees Anam Mughees Krzysztof Ejmont</i> <i>CMC-Computers, Materials and Continua</i> , Volume 75, Issue 3, Pages 6375-6393 Impact Factor: 2.000 Quartile: 3 Citations: 14 DOI: 10.32604/cmc.2023.038564	2023
Deep sequence to sequence Bi-LSTM neural networks for day-ahead peak load forecasting <i>Neelam Mughees Syed Ali Mohsin Abdullah Mughees Anam Mughees</i>	2021

A comparative analysis of various controller techniques for optimal control of smart nano-grid using GA and PSO algorithms

2020

Shahryar Yousaf Abdullah Mughees Muhammad Gufran Khan Arslan Ahmed Amin Muhammad Adnan
IEEE Access , Volume 8, Pages 205696-205711

Impact Factor: 3.367 | Quartile: 2 | Citations: 63

DOI: 10.1109/ACCESS.2020.3038021

Design and Control of Magnetic Levitation System by Optimizing Fractional Order PID Controller Using Ant Colony Optimization Algorithm

2020

Abdullah Mughees Syed Ali Mohsin
IEEE Access , Volume 8, Pages 116704-116723

Impact Factor: 3.367 | Quartile: 2 | Citations: 80

DOI: 10.1109/ACCESS.2020.3004025