Muwahida Liaquat

Associate Professor

College of Electrical & Mechanical Engineering

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About

Dr. Muwahida Liaquat is working as Associate Professor in the College of Electrical & Mechanical Engineering. Dr. Muwahida Liaquat has a PhD in Controls. Dr. Muwahida Liaquat has published 66 research articles & conference papers having a citation count of 232, carried out 2 projects and filed 2 intellectual property.

Qualifications

PhD in Controls	2006 - 2013
NUST, Islamabad , Pakistan	
MS in Electrical	2004 - 2006
NUST, Islamabad , Pakistan	
BE in Computers	2001 - 2004
NUST, Islamabad , Pakistan	
Experience	
Associate Professor	2025- Present
College of Electrical & Mechanical Engineering	

Associate Professor

College of Electrical & Mechanical Engineering

Associate Professor

College of Electrical & Mechanical Engineering

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College of Electrical & Mechanical Engineering

2014 - 2022

2022 - 2020

2020 - 2022

Professional Memberships

PEC

Research Projects

National Projects

Assistant Professor

Micro Controller Based depth Measurement 2019

Funding Agency: IGNITE Amount: PKR 69,271.00 Status: Completed

Low Cost Efficient Deth Sounding Using Microcontroller Based Solution

Funding Agency: NESCOM
Amount: PKR 450,000.00
Status: Completed

International Projects

Research Articles

Supertwisting and terminal sliding mode control of course keeping for ships by using particle swarm optimization

2022

2017

Ocean Engineering, Volume 266, Part 3, Article Number 112942 Impact Factor: 4.372 | Quartile: 1 | Citations: 16 DOI: https://doi.org/10.1016/j.oceaneng.2022.112942 Dual-stage adaptive control of hybrid energy storage system for electric vehicle application 2021 Muhammad Arslan Muhammad Kashif Azeem Muhammad Arslan Iftikhar Ahmad Muhammad Kashif Azeem Muwahida Liaquat Journal of Energy Storage, Volume 43, Article Number 103165 Impact Factor: 8.907 | Quartile: 1 | Citations: 14 DOI: 10.1016/j.est.2021.103165 Model Predictive Control: Taking the idea of Artificial Pancreas a step forward for Diabetes 2021 Management Rahmat Ullah Safdar Muwahida Liaquat Syed Muhammad Tahir Zaidi Muhammad Usman Akram International Journal of Pharma Medicine and Biological Sciences, Volume 10(4), Pages 142-147 Impact Factor: N/A DOI: 10.18178/ijpmbs.10.4.142-147 Effect of pharmacodynamical interaction between nutlin-3a and aspirin in theactivation of p53 2021 M. Suleman Awan Maria Aslam Muwahida Liaquat Aamir I. Bhatti Afrose Liaquat Journal of Theoretical Biology, Volume 522, Article Number 110696 Impact Factor: 2.405 | Quartile: 3 | Citations: 5 DOI: https://doi.org/10.1016/j.jtbi.2021.110696 Adaptive Nonlinear Control of Unified Model of Fuel Cell, Battery, Ultracapacitor and Induction Motor 2021 **Based Hybrid Electric Vehicles** Muhammad Muzammal Islam Syed Ahmad Siffat Iftikhar Ahmad Muwahida Liaquat Safdar Abbas Khan IEEE Access, Volume 9, Pages 57486-57509 Impact Factor: 3.476 | Quartile: 2 | Citations: 20 DOI: 10.1109/ACCESS.2021.3072478 Robust integral backstepping and terminal synergetic control of course keeping for ships 2021 Iftikhar Ahmad Muwahida Liaquat Syed Ahmad Siffat Muzammul Islam Ocean Engineering, Volume 221, Article Number 108532 Impact Factor: 4.372 | Quartile: 1 | Citations: 49 DOI: 10.1016/j.oceaneng.2020.108532 Variants of the Sliding Mode Control in Presence of External Disturbance for Quadrotor 2020 Muwahida Liaquat Irfan Ahmed Fahad Mumtaz Usman Ali Hameed Ullah IEEE Access, Volume 8, Pages 227810-227824 Impact Factor: 3.367 | Quartile: 2 | Citations: 17 DOI: 10.1109/ACCESS.2020.3041678 2020 Study of Formation Control of Mobile Robots muwahida liaquat Shakir Mahmood Zeeshan Ahmad Ahsan Zaheer Abdullah Khan International Journal of Mechanical Engineering and Robotics Research, Vol. 9 (1), 06 Pages Impact Factor: N/A **Nonlinear Control for Growth of Cancerous Tumor Cells** 2019 muwahida liaguat Imran Lodhi Iftikhar Ahmad Muhammad Uneeb IEEE Access, Volume 7, Pages 177628-177636 Impact Factor: 3.745 | Quartile: 1 | Citations: 16 DOI: 10.1109/ACCESS.2019.2953254 Lower order controller design using weighted singular perturbation approximation 2019 Muwahida Liaquat Muhammad Raees Furquan Azhar Umair Zulfiqar Turkish Journal of Electrical Engineering and Computer Sciences, Volume 27, Pages 3935-3950 Impact Factor: 0.625 | Quartile: 4 DOI: 10.3906/elk-1807-4 Reduced Order Controller Design for Symmetric, Non-Symmetric and Unstable Systems Using 2019 **Extended Cross-Gramian** muwahida liaquat Muhammad Raees Furquan Azhar Umair Zulfiqar Deepak Kumar Machines, volume 7, Issue no 48

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Time/frequency-limited positive-real truncated balanced realizations Muwahida Liaquat Muhammad Imran Abdul Ghafoor Umair Zulfiqar IMA Journal of Mathematical Control and Information, Pages 1-18 Impact Factor: 1.00 Quartile: 3 Citations: 16 DOI: 10.1093/imamci/dny039	2018
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Model reduction of discrete-time systems in limited intervals Muwahida Liaquat Umair Zulfiqar Turkish Journal of Electrical Engineering and Computer Sciences, Volume 26, No. 1, Article 26 Impact Factor: 0.625 Quartile: 4 Citations: 2 DOI: 10.3906/elk-1706-124	2018
A Passivity-Preserving Frequency-Weighted Model Order Reduction Technique Umair Zulfiqar Waseem Tariq Li Li Muwahida Liaquat IEEE Transactions on Circuits and Systems II: Express Briefs, Volume: 64, Issue: 11, Page 1327-1331 Impact Factor: 2.450 Quartile: 2 Citations: 15 DOI: DOI:10.1109/TCSII.2017.2685440	2017
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Control of Under Actuated System with input Constraints Atif Ali Muwahida Liaquat Muhammad Bilal Malik Pakistan Journal of Engineering and Applied Sciences, Volume 19, Pages 51-62 Impact Factor: - DOI: -	2016
Control of Under-Actuated System with input Constraints Atif Ali Mohammad Bilal Malik Muwahida Liaquat Pakistan Journal of Engineering and Applied Sciences, Volume 19, Pages 51-72 Impact Factor: 0 DOI: https://journal.uet.edu.pk/ojs_old/index.php/pjeas/article/view/282/221	2016
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Output Regulation of Feedback Linearizable System (Single Link Robot Manipulator): A Cascaded High Gain Observer Approach Muhammad Saad Muwahida Liaquat 7th IEEE International Conference on Control Systems, Computing and Engineering, res.country(157,) Citations: N/A DOI: 10.1109/ICCSCE.2017.8284409	2017

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Cooperative Output Regulation for Higher-Order Linear Multi-agent Systems with Fixed and Switching Topologies Muwahida Liaquat Waqar Ali	2015

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2015 9th International Conference on Electrical and Electronics Engineering (ELECO), res.country(224,)

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Editorial Activities	
IET Control Theory and Applications Reviewed Papers for Journals Impact Factor: 2.670	2023
Reviewed Papers for Journals Impact Factor: 1.132	2023
Isa Transactions Reviewed Papers for Journals Impact Factor: 5.911	2022
Reviewed Papers for Journals Impact Factor: 0	2022
Reviewed Papers for Journals Impact Factor: 0	2022
Reviewed Papers for Journals Impact Factor: 10.215	2022
Reviewed Papers for Journals Impact Factor: 5.468	2021
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Reviewed Papers for Journals Impact Factor: 2.779	2021
Reviewed Papers for Journals Impact Factor: 2.149	2021
Reviewed Papers for Journals Impact Factor: 1.034	2020
Reviewed Papers for Journals Impact Factor: 1.034	2020

Reviewed Papers for Journals Impact Factor: 1.161	2020
Reviewed Papers for Journals Impact Factor: Scopu	2020
Reviewed Papers for Journals Impact Factor: 3.426	2020
Reviewed Papers for Journals Impact Factor: 7.503	2020
Reviewed Papers for Journals Impact Factor: 2.003	2019
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Intellectual Property	
Copyrights	
Osteodoc an Al based Application for Osteoarthritis Status: Filed	2022
Patents	
Industrial Designs	
PCB No. 10 of Voltage Regulator Assembly of Tank (T59/69) Status: Filed	2019

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