Hasan Arshad Nasir

Assistant Professor

School of Electrical Engineering and Computer Science

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About

Dr. Hasan Arshad Nasir is working as Assistant Professor in the School of Electrical Engineering and Computer Science. Dr. Hasan Arshad Nasir has a PhD in Control Systems. Dr. Hasan Arshad Nasir has published 29 research articles & conference papers having a citation count of 84, carried out 3 projects and filed 1 intellectual property.

Qualifications

PhD in Control Systems 2012 - 2016
University of Melbourne , Australia

MS in Control Systems 2010 - 2011
Lahore University of Management Sciences , Pakistan

BE in Electrical Engineering 2005 - 2009
NUST, Islamabad , Pakistan

Experience

Assistant Professor 2021- Present
School of Electrical Engineering and Computer Science

Assistant Professor 2021 - 2021
School of Electrical Engineering and Computer Science

Assistant Professor 2018 - 2021
School of Electrical Engineering and Computer Science

Assistant Professor 2018 - 2018
School of Electrical Engineering and Computer Science

Post doctoral Research Fellow 2016 - 2018
University of Melbourne , Melbourne Australia

Lab Demonstrator 2013 - 2016
University of Melbourne , Melbourne, Australia

Teaching Fellow 2011 - 2012
Lahore University of Management and Sciences , Lahore, Pakistan

Research Assistant 2010 - 2011
Lahore University of Management and Sciences , Lahore, Pakistan

Lab Engineer 2009 - 2010
Lahore University of Management and Sciences , Lahore, Pakistan

Awards

Professional Memberships

IEEE Since 2020

IEEE CSS Since 2020

Research Projects

National Projects

Securing Socio-Economic Stability and Data-Driven Resilience for Ungauged Namal Valley Watershed at Monsoon Margins 2022

Funding Agency: DAAD
Amount: PKR 11,699,289.00
Status: Completed

Potential of Demand Response Services in Pakistan 2018

Funding Agency: Swiss Seed Mondey Grants with South Asia and Iran
Amount: PKR 1,969,977.00
Status: Completed

Potential of Demand Response Services in Pakistan 2018

Funding Agency: ZHAW Switzerland
Amount: PKR 1,969,977.00
Status: Completed

International Projects

Research Articles

A Demand Response based solution to Overloading in Underdeveloped Distribution Networks 2021

Muhammad Jibran Hasan Arshad Nasir Faran Qureshi Usman Ali Colin Jones Imran Mahmood

IEEE Transactions on Smart Grid, Volume12, Issue 5, Pages 4059-4067

Impact Factor: 10.275 | **Quartile:** 1 | **Citations:** 15

DOI: https://doi.org/10.1109/TSG.2021.3079959

Comparative study of Kalman filter-based target motion analysis by incorporating Doppler frequency measurements 2021

Ehsan Ul Haq Hasan Arshad Nasir Asif Iqbal Muhammad Ali Qadir

International Journal on Smart Sensing and Intelligent Systems, Volume 14(1), Pages 1-12

Impact Factor: 0

DOI: https://doi.org/10.21307/ijssis-2021-008

Stochastic Model Predictive Control Based Reference Planning for Automated Open-Water Channels 2021

Hasan Arshad Nasir Michael Cantoni Yuping Li Erik Weyer

IEEE Transactions on Control Systems Technology, Volume 29, Issue 2, Pages 607-619

Impact Factor: 5.418 | **Quartile:** 1 | **Citations:** 14

DOI: 10.1109/TCST.2019.2952788

A Water Evaluation and Planning-based framework for the long-term prediction of urban water demand and supply 2021

Arfa Saleem Imran Mahmood Hessam Sarjoughian ASAD WAQAR MALIK Hasan Arshad Nasir

Simulation , Pages 1-23

Impact Factor: 1.699 | **Quartile:** 3 | **Citations:** 18

DOI: https://doi.org/10.1177/0037549720984250

A Scenario-Based Stochastic Optimization Approach for Non-Intrusive Appliance Load Monitoring 2020

Muhammad Shahzad Younis Hasan Arshad Nasir Muhammad Shahroz

IEEE Access , Volume 8, Pages 142205-142217

Impact Factor: 3.367 | **Quartile:** 2 | **Citations:** 5

DOI: 10.1109/ACCESS.2020.3013682

Data Assimilation of Mobile Sensors in Hydrological Models of Unsteady Flow 2019

Affan Affan Hasan Arshad Nasir Basit Shafiq Abubakr Muhammad

IFAC-PapersOnLine , Volume 52, Issue 23, Pages 29-36

Impact Factor: - | **Citations:** 3

DOI: https://doi.org/10.1016/j.ifacol.2019.11.005

A Scenario-Based Stochastic MPC Approach for Problems With Normal and Rare Operations With an Application to Rivers 2019

Algo Care Erik Weyer Hasan Arshad Nasir

IEEE Transactions on Control Systems Technology, Volume 27, Issue 4, Pages 1397-1410

Impact Factor: 5.312 | **Quartile:** 1 | **Citations:** 18

DOI: 10.1109/TCST.2018.2811404

System identification of the upper part of Murray River 2016

Erik Weyer Hasan Arshad Nasir

Control Engineering Practice , Volume 52, Pages 70-92

Impact Factor: 2.602 | **Quartile:** 2 | **Citations:** 11

DOI: 10.1016/j.conengprac.2016.04.006

Conference Proceedings

Hydrological Modelling of Data-Scarce Catchments: A Case Study of Namal Valley 2022

Muhammad Kashif Hasan Arshad Nasir Usman Ali Talha Manzoor

IEEE International Geoscience and Remote Sensing Symposium, res.country(157,)

Citations: N/A

DOI: 10.1109/IGARSS46834.2022.9883310

Identification of Supporting Hyperplanes in Scenario Optimisation Problems with Random Linear Constraints 2020

Hamza Mahmood Hasan Arshad Nasir Usman Ali

IEEE Conference on Decision and Control (CDC), res.country(259,)

Citations: N/A
DOI: 10.1109/CDC42340.2020.9303867

State Estimation in 2D Hydrological Models using Lagrangian Sensors and Low Resolution Elevation Maps 2020

Affan Affan Hasan Arshad Nasir Abubakr Muhammad Affan Affan Hasan Arshad Nasir Abubakr Muhammad

IFAC World Congress 2020, res.country(57,)

Citations: N/A
DOI: Not Available yet

A Demand Response Framework to Overcome Network Overloading in Power Distribution Networks 2020

Muhammad Jibran Hasan Arshad Nasir Faran Qureshi Usman Ali Colin Jones

IFAC World Congress, Germany, res.country(57,)

Citations: N/A
DOI: Not Available Yet

Towards the Removal of Redundant Constraints from Scenario Optimisation Problems with Additive and Multiplicative Uncertainties 2019

Hasan Arshad Nasir Erik Weyer Iman Shames Michael Cantoni

IEEE 58th Conference on Decision and Control (CDC) , res.country(75,)

Citations: N/A
DOI: 10.1109/CDC40024.2019.9029625

Towards Redundant Constraint Removal in Scenario Approximation of Optimal Control Problems with Multiplicative Model Uncertainties 2019

Hasan Arshad Nasir Erik Weyer Iman Shames Michael Cantoni

IEEE Conference on Decision and Control, (CDC) 2019, res.country(75,)

Citations: N/A
DOI: N/A

Data Assimilation of Mobile Sensors in Hydrological Models of Unsteady Flow 2019

Affan Affan Hasan Arshad Nasir Abubakr Muhammad Basit Shafiq

IFAC Workshop on Control Methods in Water Resource Systems, res.country(165,)

Citations: N/A
DOI: https://www.cmwrs2019.org/events/data-assimilation-of-mobile-sensors-in-hydrological-models-of-unsteady-flow/

Efficient River Management using Stochastic MPC and Ensemble Forecast of Uncertain In-flows 2018

Hasan Arshad Nasir Tony Zhao Algo Care Quan J Wang Erik Weyer

IFAC Workshop on Integrated Assessment Modelling for Environmental Systems, res.country(109,)

Citations: N/A
DOI: 10.1016/j.ifacol.2018.06.196

An efficient implementation of Stochastic MPC for open channel water-level planning 2017

Hasan Arshad Nasir Michael Cantoni Erik Weyer

IEEE 56th Annual Conference on Decision and Control (CDC), res.country(13,)

Citations: N/A
DOI: 10.1109/CDC.2017.8263715

A randomised approach to Multiple Chance-Constrained Problems: An application to flood avoidance 2016

Hasan Arshad Nasir Algo Care Erik Weyer

2016 IEEE 55th Conference on Decision and Control (CDC), res.country(233,)

Citations: N/A
DOI: 10.1109/CDC.2016.7799225

Control of rivers with flood avoidance 2016

Hasan Arshad Nasir Algo Care Erik Weyer

2016 Australian Control Conference (AuCC) , res.country(13,)

Citations: N/A
DOI: 10.1109/AUCC.2016.7868018

Scenario based stochastic MPC schemes for rivers with feasibility assurance 2016

Hasan Arshad Nasir Simone Garatti Erik Weyer

2016 European Control Conference (ECC) , res.country(59,)

Citations: N/A
DOI: 10.1109/ECC.2016.7810573

A Randomised Approach to Flood Control Using Value-at-Risk 2015

Hasan Arshad Nasir Algo Care Erik Weyer

2015 54th IEEE Conference on Decision and Control (CDC), res.country(113,)

Citations: N/A

DOI: 10.1109/CDC.2015.7402831

Estimation of models for the upper part of Murray River with flow dependent parameters 2015

Hasan Arshad Nasir Erik Weyer

IFAC Symposium on System Identification, res.country(48,)

Citations: N/A

DOI: 10.1016/j.ifacol.2015.12.216

Control of a river stretch with uncertain inflows 2014

Hasan Arshad Nasir Erik Weyer

2014 4th Australian Control Conference (AUCC), res.country(13,)

Citations: N/A

DOI: 10.1109/AUCC.2014.7358681

System Identification of Distributory Canals in the Indus Basin 2014

Saad Abul Aleem Abubakr Muhammad Hasan Arshad Nasir

IFAC World Congress, res.country(247,)

Citations: N/A

DOI: 10.3182/20140824-6-ZA-1003.01088

System identification of the upper Murray river 2014

Hasan Arshad Nasir Erik Weyer

2014 European Control Conference (ECC), res.country(75,)

Citations: N/A

DOI: 10.1109/ECC.2014.6862382

Comparison of Prediction Error Methods and Subspace Identification Methods for Rivers 2013

Hasan Arshad Nasir Erik Weyer

2013 Australian Control Conference, res.country(13,)

Citations: N/A

DOI: 10.1109/AUCC.2013.6697309

Locating Leaks & Dumps in Open Channels with Minimal Sensing 2012

Hasan Arshad Nasir Abubakr Muhammad

2012 IEEE International Conference on Control Applications

Citations: N/A

DOI: 10.1109/CCA.2012.6402650

Model-Driven Performance Analysis of Large Scale Irrigation Networks 2012

Muhammad Umer Tariq Hasan Arshad Nasir Abubakr Muhammad Marilyn Wolf

2012 IEEE/ACM Third International Conference on Cyber-Physical Systems, res.country(233,)

Citations: N/A

DOI: 10.1109/ICCPS.2012.23

Control of Very-Large Scale Irrigation Networks: A CPS Approach in a Developing-World Setting 2011

Hasan Arshad Nasir Abubakr Muhammad

IFAC World Congress, res.country(109,)

Citations: N/A

DOI: https://doi.org/10.3182/20110828-6-IT-1002.03352

Intellectual Property

Copyrights

Patents

Solar Tracking Solar Panel Using Sun Prediction Algorithm and Linear Actuator 2020

Status: Filed

Industrial Designs

Trademarks