# Hafsa Iqbal

#### Assistant Professor

School of Electrical Engineering and Computer Science

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#### **About**

Dr. Hafsa Iqbal is working as Assistant Professor in the School of Electrical Engineering and Computer Science. Dr. Hafsa Iqbal has a PhD in Electrical Electronics Engineering and Automation. Dr. Hafsa Iqbal has published 10 research articles & conference papers, carried out 2 projects and filed 0 intellectual property.

### **Qualifications**

PhD in Electrical Electronics Engineering and Automation Universidad Carlos III de Madrid , Spain	2018 - 2022
MS in Electrical Engineering NUST, Islamabad , Pakistan	2018 - 2018
BSc in Electrical Electronics UET Taxila , Pakistan	2012 - 2016

## **Experience**

Assistant Professor	2024- Present
School of Electrical Engineering and Computer Science	
Assistant Professor	2022 - 2022
School of Electrical Engineering and Computer Science	

## **Research Projects**

## **National Projects**

An Efficient Model for Autonomous Vehicles to Detect Anomalous Scenes Based on Intention	
Estimation	

Funding Agency: NFRP Amount: PKR 1,000,000.00 Status: Completed

## An Efficient Model for Autonomous Vehicles to Detect Anomalous Scenes Based on Intention

**Estimation** 

Funding Agency: NUST Amount: PKR 1,000,000.00 Status: Completed

#### **International Projects**

2023

2023

# **Conference Proceedings**

Physical Layer Security in Intelligent Reflecting Surface-Enabled Small NOMA IoT Network  Haleema Sadia Hafsa Iqbal Sana Qadir	2024
11th International Conference on Wireless Networks and Mobile Communications, res.country(260,)  Citations: N/A  DOI: 979-8-3503-7786-6/24/\$31.00©2024 IEEE	
Multiuser Capacity Enhancement in B5G Networks Using Hybrid CDMA-NOMA Scheme  Sabahat Sherien Haleema Sadia Hafsa Iqbal  International Conference on Green Energy, Computing and Sustainable Technology, res.country(157,)  Citations: N/A	2024
DOI: Nil	
MINDTwin AI: Multiphysics Informed Digital-Twin for Fault Localization in Induction Motor using A	2023
Amina Bashir Muhammad Ahmed Mohsin Muhammad Jazib Dr. Hafsa Iqbal The 8th IEEE International Conference "Big Data, Knowledge and Control Systems Engineering" – BdKCSE'2023, res.country(22,) Citations: N/A DOI: Nil	
MIMO-NOMA with OSTBC for B5G Cellular Networks with Enhanced Quality of Service	2023
Hafsa Iqbal Haleema Sadia Ridha Alaa Ahmed The 10th International Conference on Wireless Networks and Mobile Communications, res.country(224,) Citations: N/A DOI: Nil	
A Data-Driven Approach for the Localization of Interacting Agents via a Multi-Modal Dynamic Bayesian	2022
Network Framework  Abrham Shiferaw Alemaw Giulia Slavic Hafsa Iqbal Lucio Marcenaro David Martin Gomez Carlo Regazzoni  18th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS), res.country(68,)  Citations: N/A  DOI: 10.1109/AVSS56176.2022.9959648	
Detection of Abnormal Motion by Estimating Scene Flows of Point Clouds for Autonomous Driving  Hafsa Iqbal Abdulla Al-Kaff Pablo Marin Lucio Marcenaro David Martin Gomez Carlo Regazzoni  IEEE International Intelligent Transportation Systems Conference (ITSC), res.country(233,)  Citations: N/A  DOI: 10.1109/ITSC48978.2021.9565105	2021
Optimization of Probabilistic Switching Models Based on a Two-Step Clustering Approach  Hafsa Iqbal Damian Campo Giulia Slavic Lucio Marcenaro David Martin Gomez Carlo Regazzoni  34th IEEE Workshop on Signal Processing Systems (SiPS), res.country(183,)  Citations: N/A  DOI: 10.1109/SiPS50750.2020.9195244	2020
Incremental learning of abnormalities in autonomous systems  Hassan Zaal Hafsa Iqbal Damian Campo Lucio Marcenaro Carlo Regazzoni  16th IEEE International Conference on Advanced Video and Signal Based Surveillance (AVSS), res.country(227,)  Citations: N/A  DOI: 10.1109/AVSS.2019.8909827	2019
Clustering optimization for abnormality detection in semi-autonomous systems  Hafsa Iqbal Damian Campo Mohamad Baydoun Lucio Marcenaro David Martin Gomez Carlo Regazzoni International workshop on multimodal understanding and learning for embodied applications, res.country(75,)  Citations: N/A  DOI: 10.1145/3347450.3357657	2019
Range Estimation in Radar using Maximum Likelihood Estimator  Haleema Sadia Sabahat Sherien Hafsa Iqbal Muhammad Zeeshan Aimal Khan Saad Rehman  20th International Conference of Computer and Information Technology (ICCIT), res.country(19,)  Citations: N/A	2017

# **Editorial Activities**

## IEEE transactions on circuits and systems for video technology

Reviewed Papers for Journals

Impact Factor: 8.43

2023

2023

Edited Journal Issue / Proceeding / Book

Impact Factor: 0.922