

## PUBLICATIONS

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### Journal Papers

#### **Optimizing Agricultural Data Security: Harnessing IoT and AI with Latency Aware Accuracy Index (LAAI)**

Authors: **Omar Bin Samin**, Nasir Ahmed Abdulkhader Algeelani, Ammar Bathich, Maryam Omar, Musadaq Mansoor and Amir Khan

Published in **PeerJ - Computer Science** (28<sup>th</sup> August, 2024) [Impact Factor: 3.8]

#### **CapGAN: Text to Image Synthesis using Capsule GANs**

Authors: Maryam Omar, Hafeez Ur Rehman, **Omar Bin Samin**, Gianfranco Politano, Alfredo Benso and Moutaz Alazab

Published in **Information** (9<sup>th</sup> October, 2023) [Impact Factor: 3.1]

#### **Malicious Agricultural IoT Traffic Detection and Classification: A Comparative Study of ML Classifiers**

Authors: **Omar Bin Samin**, Nasir Ahmed Abdulkhader Algeelani, Ammar Bathich, Ghulam Mujtaba Adil, Abdul Qadus and Adnan Amin

Published in **Journal of Advances in Information Technology** (17<sup>th</sup> August, 2023) [Impact Factor: 1.0]

#### **CapPlant: A Capsule Network based Framework for Plant Disease Classification**

Authors: **Omar Bin Samin**, Maryam Omar and Musadaq Mansoor

Published in **PeerJ - Computer Science** (5<sup>th</sup> November, 2021) [Impact Factor: 3.8]

### Conference Papers

#### **IoT based Smart Gloves for Women Safety** Authors: Zahid Ali, Majid Ali Khan, **Omar Bin Samin**, Musadaq Mansoor and Maryam Omar

In proceedings of **International Conference on Innovative Computing**, Lahore, Pakistan. (9<sup>th</sup> – 10<sup>th</sup> November, 2021)

#### **IoT based Time Triggered SPE Smart Switch for AC Appliances Control**

Authors: **Omar Bin Samin**, Maryam Omar, Musadaq Mansoor, Noman Naseeb, Samad Ali Shah and Aqil Amjad Khan

In proceedings of **International Conference on Innovations in Bio-Inspired Computing and Applications (IBICA 2020)**, Online. (16<sup>th</sup> – 18<sup>th</sup> December, 2020)

#### **WakeMeUp: Weight Dependent Intelligent and Robust Alarm System using Load Cells**

Authors: **Omar Bin Samin**, Sumaira Imtiaz, Maryam Omar, Noman Naseeb and Samad Ali Shah

In proceedings of **International Conference on Intelligent Systems Design and Application (ISDA 2020)**, Online. (12<sup>th</sup> – 15<sup>th</sup> December, 2020)

#### **Accelerometer and Magnetometer Enabled Entity Following Automated Suitcase**

Authors: **Omar Bin Samin**, Hamza Sohail, Maryam Omar and Hamza Hummam

In proceedings of **International Conference on Emerging Trends in Smart Technologies (ICETST 2020)**, Karachi, Pakistan. (26<sup>th</sup> – 27<sup>th</sup> March, 2020)

#### **RGB based EEG Controlled Virtual Keyboard for Physically Challenged People**

Authors: Noman Naseeb, Mansoor Alam, **Omar Bin Samin**, Maryam Omar, Syeda Shaista Khushbakth and Samad Ali Shah

In proceedings of **International Conference on Computing, Mathematics and Engineering Technologies (iCoMET 2020)**, Sukkur, Pakistan. (29<sup>th</sup> – 30<sup>th</sup> January, 2020)

#### **IoT based Smart Security System using PIR and Microwave Sensors**

Authors: Muhammad Zeeshan Saeed, Raja Raheel Ahmed, **Omar Bin Samin** and Nusrat Ali

In proceedings of **International Conference on Mathematics, Actuarial, Computer Science and Statistics (MACS 2019)**, Karachi, Pakistan. (14<sup>th</sup> – 15<sup>th</sup> December, 2019)

**Intelligent Trash Bin (ITB) with Trash Collection Efficiency Optimization using IoT Sensing**

Authors: Hamza Sohail, Saif Ullah, Asim Khan, **Omar Bin Samin** and Maryam Omar

In proceedings of **International Conference on Information and Communication Technologies (ICICT 2019)**, Karachi, Pakistan. (16<sup>th</sup> – 17<sup>th</sup> November, 2019)

**A Robust Automated Vehicle Tracking System**

Authors: **Omar Bin Samin**, Samad Ali Shah, Imran Ahmed and Maryam Omar

In proceedings of **Academicsera 48<sup>th</sup> International Conference**, Bangkok, Thailand. (5<sup>th</sup> – 6<sup>th</sup> April, 2019)

**Smartshed: An Automatic Shed System based on Rain, Temperature and Light Intensity**

Authors: Maryam Omar, **Omar Bin Samin** and Imran Ahmed

In proceedings of **Academicsera 48<sup>th</sup> International Conference**, Bangkok, Thailand. (5<sup>th</sup> – 6<sup>th</sup> April, 2019)

**HealthBand for Dementia Patients: Fall and Scream Detector and Caretaker Helper**

Authors: Zeeshan Alam, Huma Samin and **Omar Bin Samin**

In proceedings of **International Conference on Data Processing and Robotics (ICDPR 2018)**, Boracay, Philippines. (19<sup>th</sup> – 21<sup>st</sup> January, 2018)