ISSN Print: 2074-904X, ISSN Online: 2074-9058 Volume 17, Number 6, December 2025

## International Journal of

## Intelligent Systems and Applications



IJISA Vol.17
Http://www.mecs-press.org



## International Journal of Intelligent Systems and Applications (IJISA)

ISSN Print: 2074-904X, ISSN Online: 2074-9058

Volume 17, Number 6, December 2025

## Contents

REGULAR PAPERS	
Improving Boiler Performance Using Machine Learning: A Predictive Approach to Steam Demand Optimization  Hermanus M. Scholtz, Hadi Harb	1
An Innovative System for Daily Thunderstorm Event Prediction using Deep Learning  Md. Tasfirul Alam Siyam, Mahfuzul H. Chowdhury	16
Geno-Dwarf-ML: Structural Analysis of Machine Learning Techniques for Genetic Dwarfism Detection Nishit Kaul, Sameer Kaul, Bharti Bhat, Sheikh Amir Fayaz, Majid Zaman, Waseem Jeelani Bakhsi	33
Determining Emotion Intensities from Audio Data Using Ensemble Models: A Late Fusion Approach Simon Kipyatich Kiptoo, Kennedy Ogada, Tobias Mwalili	44
Performance Analysis of Deep Learning Techniques for Multi-Focus Image Fusion Ravpreet Kaur, Sarbjeet Singh	58
Non-intrusive Load Monitoring for Home Appliance Using Sequence-to-point Convolutional Neural Networks  John Oluwasegun Memud, Brendan Chijioke Ubochi, Michael Rotimi Adu, Nnamdi Nwulu	75
Optimized Octave Convolution Network Model for Histopathological Image Classification Binet Rose Devassy, Jobin K. Antony, Dominic Mathew	94
Enhanced NSGA-II Algorithm for Solving Real-world Multi-objective Optimization Problems Muskan Kapoor, Bhupendra Kumar Pathak, Rajiv Kuamr	105
Computational Linguistics Meets Libyan Dialect: A Study on Dialect Identification  Mansour Essgaer, Khamis Massud, Rabia Al Mamlook, Najah Ghmaid	118
CervixCan-Net: An Enhanced Cervical Cancer Classification Approach using Deep Learning Anik Kumar Saha, Jubayer Ahamed, Dip Nandi, Niloy Eric Costa	131