

ISSN Print: 2074-904X, ISSN Online: 2074-9058  
Volume 18, Number 2, April 2026

International Journal of

# Intelligent Systems and Applications

**Vol.18**

No.2 Apr. 2026

**IJISA** **Vol.18**

[Http:// www.mecs-press.org](http://www.mecs-press.org)

Vol.18 No.2 April 2026



## Contents

---

### REGULAR PAPERS

---

|   |     |
|---|-----|
| Empowering Community Work: Using Semi-Supervised Learning to Identify Emerging Community Needs and Service Gaps from Massive Unstructured Text<br><i>Yih-Chang Chen</i>                                       | 1   |
| Integrated Topic Modeling and Feature Engineering for High-accuracy Sentiment Classification in Consumer Reviews<br><i>Vijay Gupta, Punam Rattan, Mukesh Kumar</i>  | 13  |
| Meta-learning Approach for Time Series Forecasting: First-order MAML and Reptile<br><i>Pratik Zinjad, Tushar Ghorpade, Vanita Mane</i>  | 27  |
| Transformer-Based vs. CNN-Based Deep Learning for Alzheimer’s Disease Classification: Performance and Deployment<br><i>Nhat-Kha Nguyen, Thi-Thu-Hien Pham, Nhat-Minh Nguyen, Tan-Nhu Nguyen, Ngoc-Bich Le</i> | 44  |
| An Optimized Deep Neural Network Model for Image Classification in Resource-constrained Environments<br><i>Raafi Careem, Md Gapar Md Johar</i>  | 64  |
| Predicting Public Transport User Honesty: A Machine Learning Approach to Lost Item Returns<br><i>Simon A. Ocansey, Makafui Agboyi, Gideon L. Sackitey, AKM K. Islam</i>                                       | 85  |
| Internet Addiction and its Influence on University Students using Relationship Mining<br><i>Geetika Johar, Ravindra Patel</i>   | 98  |
| Identification of Deceptive Online Transactions Using Machine Learning Driven Knowledge Discovery<br><i>Himanshu Sirohi, Pradeep Kumar, Anuradha Singh, Bijendra Tyagi, Niraj Singhal, Avimanyou Vatsa</i>    | 110 |
| Framework for Incident Identification Based on LLMs and Cybersecurity Ontologies<br><i>Wallace A. Pinheiro, Ricardo Q. A. Fernandes</i>   | 125 |
| A Neutrosophic-Based Unsupervised Approach for Sudden Drift Detection<br><i>Rania S. Lutfi</i>  | 139 |
| Sentence Classification in Medical Abstracts Using Quantized Transformer and BiLSTM Architecture<br><i>Ahmed Abdal Shafi Rasel, Md. Towhidul Islam Robin, Md. Samiul Islam, Mehedi Hasan</i>                  | 156 |
| A Novel Reference Model for Intelligent and Comfortable Longitudinal Vehicle Control: Theory, Optimization, and Validation<br><i>Flavien H. Somda, Désiré Guel, Kisito K. Kaboré, Antoine Schorgen</i>        | 167 |

---