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Editorial Preview for February 2026 Issue

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Abstract - The February 2026 issue presents 17 research papers within its regular section, covering a wide range of areas including Artificial Intelligence (AI), Machine Learning (ML), Web and Cloud Technologies, Recommender Systems and Software Engineering. The collection reflects JIWE's ongoing effort to advance research in the informatics and web engineering domain. A special thematic section, guest-edited by Prof. Ts. Dr. Hairulnizam Bin Mahdin, centers on "Intelligent Systems and the Next Wave of Digital Innovation". This section studies the pervasive role of AI and machine learning in multiple sectors of industrial automation and disaster preparedness. These studies also emphasize on trust, transparency, and data-driven architectures, demonstrating how converging technologies create more inclusive, and efficient digital ecosystems. Several papers in this issue also align with the United Nations Sustainable Development Goals (SDGs) which includes SDG 3 (Good Health and Well-being) through advancements in medical imaging and disease detection, SDG 9 (Industry, Innovation, and Infrastructure) via research on cloud-based systems and industrial optimization, SDG 10 (Reduced Inequalities) through the development of inclusive sign language interfaces, SDG 11 (Sustainable Cities and Communities) via innovations in flood management and air quality monitoring, and SDG 13 (Climate Action) through neuro-intelligent techniques for drought prediction. With these alignments, it shows our journal commitment of moving beyond just theory and creating a real-world impact.

Keywords— Editorial Preview, Artificial Intelligence, Machine Learning, Web and Cloud Technologies, Recommender Systems, Software Engineering, Intelligent System, Digital Innovation, Sustainable Development Goals.

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PREVIEW

In this issue, we bring you 17 cutting-edge articles in our regular section, along with 7 exciting contributions in the "Intelligent Systems and the Next Wave of Digital Innovation" thematic section, including editorial insights from our Thematic Editor. These selected articles are from 17 countries such as Australia, Bangladesh, China, Cyprus, India, Indonesia, Iraq, Jordan, Malaysia, Nigeria, Pakistan, Slovenia, Sri Lanka, United Arab Emirates, UK, USA, and Uzbekistan (in 5 continents: Africa, Asia, Australia, Europe, North America).

These papers are: Robust Medical Image Prediction via Adaptive Reconstruction: Bridging the Gap in Low-Quality Data [1], Efficiency of Neo4j in Designing and Analyzing Graph Database for Air Quality Analy [2], Radiology Report Generation Using Deep Learning and Web-Based Deployment for Chest X-Ray Analysis [3], Hybrid



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Sentiment Analysis Model for Customer Feedback Interpretation Using Lexicon, Machine Learning and Deep Learning Techniques [4], Deep Learning-Based Automatic Detection and Diagnosis of Tuberculosis from Chest X-ray Images: A comprehensive Analysis [5], Ontology-Based E-Commerce Recommender System: A Hybrid Semantic Filtering Approach [6], AI-Driven Malware Analysis and Detection: A Comprehensive Survey of Techniques, Trends and Challenges [7], Optimised Data Integration using Transformer Model and Resource Description Framework [8], Comparative Analysis of the Performance of CSS Animation Methods (Transition and Animation) under High DOM Load [9], XAI-Driven Explainability for Cardiovascular Diseases Prediction [10], A Sentiment-based Music Recommendation System Using Machine Learning and Natural Language Processing for Emotion-aware Song Suggestion [11], A Unified Cloud-based System for the Tyre Retail Industry: Design and Implementation of Tracktive [12], An Empirical Evaluation of Machine Learning Methods and Text Classifiers for Sentiment Analysis of Online Consumer Reviews [13], Enhancing Fraud Detection in Financial Transactions using LightGBM and Random Forest [14], Real-Time Posture Monitoring for Effective Exercise Using MediaPipe Python [15], Design and Implementation of a Web-Based Lecture Timetable Scheduling System [16] and Vehicle Re-identification System using Residual Network with Instance-Batch Normalization [17].

The thematic section starts with an editorial preview:

Editorial: Intelligent Systems and the Next Wave of Digital Innovation [18]

“The trajectory is clear: intelligent systems will soon be part of the basic infrastructure for digital development.”

As we navigate this transition, we are reminded that the true value of an intelligent system lies not just in its complexity, but in its ability to serve human needs with integrity.

The papers covered are: Test Case Prioritization Using Ant Colony Optimization to Improve Fault Detection and Time [19], Flood Disaster Preparedness and Response Using a Web-Based Integrated Flood Management System (IFMS) [20], Evaluating Accuracy Latency and Robustness of Face Recognition Models for Real Time Web Applications [21], An Enhanced Glowworm Swarm Optimization for Minimizing Surface Roughness in Die Sinking Electrical Discharge Machining [22], ANFIS and RBFNN Efficacy and Timescale Dependence in SPEI-Based Drought Prediction using Meteorological Inputs [23], and A Conceptual Framework on Development of Sign Language Chatbot for E-Commerce [24].

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AUTHOR CONTRIBUTIONS

Fong-Yee Lee: Writing – Original Draft Preparation;
Su-Cheng Haw: Writing – Review & Editing.

CONFLICT OF INTERESTS

No conflict of interests were disclosed.

ETHICS STATEMENTS

Our publication ethics follow The Committee of Publication Ethics (COPE) guideline. <https://publicationethics.org/>

DATA AVAILABILITY

Data availability is not applicable to this paper as no new data were created or analyzed in this study.



REFERENCES

- [1] P. Singhal, and M. Singh, “Robust Medical Image Prediction via Adaptive Reconstruction: Bridging the Gap in Low-Quality Data,” *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 1-17, 2026, doi: 10.33093/jiwe.2026.5.1.1.
- [2] J. Chavda, K. Bharvad, R. Parmar, and N. Arora, “Efficiency of Neo4j in Designing and Analyzing Graph Database for Air Quality Analy,” *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 18-36, 2026, doi: 10.33093/jiwe.2026.5.1.2.
- [3] D. Agbolade, P. Heydarian, and S. Ahmad, “Radiology Report Generation Using Deep Learning and Web-Based Deployment for Chest X-Ray Analysis,” *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 37-51, 2026, doi: 10.33093/jiwe.2026.5.1.3.
- [4] J. Y. Jou, S. L. Lew, and L. T. Tan, “Hybrid Sentiment Analysis Model for Customer Feedback Interpretation Using Lexicon, Machine Learning and Deep Learning Techniques,” *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 52-68, 2026, doi: 10.33093/jiwe.2026.5.1.4.
- [5] P. C. Ahanotu, D. A. Adedigba, R. Hasan, and S. Palaniappan, “Deep Learning-Based Automatic Detection and Diagnosis of Tuberculosis from Chest X-ray Images: A comprehensive Analysis,” *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 69-85, 2026, doi: 10.33093/jiwe.2026.5.1.5.
- [6] J. Pua, S.-C. Haw, L. Dwi Krisnawati, S. Al-Juboori, and G.-K. Tong, “Ontology-Based E-Commerce Recommender System: A Hybrid Semantic Filtering Approach,” *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 86-105, 2026, doi: 10.33093/jiwe.2026.5.1.6.
- [7] S. Khan, H. Raza, and M. Alam, “AI-Driven Malware Analysis and Detection: A Comprehensive Survey of Techniques, Trends and Challenges,” *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 106-129, 2026, doi: 10.33093/jiwe.2026.5.1.7.
- [8] J. A. Achir, M. Abdulkarim, and M. Abdullahi, “Optimised Data Integration using Transformer Model and Resource Description Framework,” *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 130-145, 2026, doi: 10.33093/jiwe.2026.5.1.8.
- [9] D. Zakharov, and E. Mironenko, “Comparative analysis of the performance of CSS animation methods (transition and animation) under high DOM load,” *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 146-166, 2026, doi: 10.33093/jiwe.2026.5.1.9.

- [10] J. Andritsch, and J. Dike, "XAI-Driven Explainability for Cardiovascular Diseases Prediction," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 167-176, 2026, doi: 10.33093/jiwe.2026.5.1.10.
- [11] B. X. Yu, S. P. Kumaresan, and N. Palanichamy, "A Sentiment-Based Music Recommendation System Using Machine Learning and Natural Language Processing for Emotion-Aware Song Suggestion," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 177-187, 2026, doi: 10.33093/jiwe.2026.5.1.11.
- [12] W. L. W. Theo, S.-C. Chong, K.-M. Lim, L.-Y. Chong, and K.-K. Wee, "A Unified Cloud-Based System for the Tyre Retail Industry: Design and Implementation of Tracktive," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 188-203, 2026, doi: 10.33093/jiwe.2026.5.1.12.
- [13] P. Q. Lo, S. L. Ng, and L.-x. Jiao, "An Empirical Evaluation of Machine Learning Methods and Text Classifiers for Sentiment Analysis of Online Consumer Reviews," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 204-217, 2026, doi: 10.33093/jiwe.2026.5.1.13.
- [14] W.-P. Khor, K.-O. M. Goh, C.-Y. Law, C. Tee, Y.-W. Sek, and R. Khan, " "Fraud Detection In Financial Transactions Using Machine Learning Approaches," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 218-235, 2026, doi: 10.33093/jiwe.2026.5.1.14.
- [15] W. I. W. Wan Noor Asmawi and S. P. Kumaresan, "Real-Time Posture Monitoring for Effective Exercise Using MediaPipe Python," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 236-251, 2026, doi: 10.33093/jiwe.2026.5.1.15.
- [16] S. Abubakar, M. K. Dauda, M. A. Musa, and B. M. Muhammad, "Design and Implementation of a Web-Based Lecture Timetable Scheduling System," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 252-266, 2026, doi: 10.33093/jiwe.2026.5.1.16.
- [17] W. J. Low, K.-O. M. Goh, C.-Y. Law, C. Tee, Y.-W. Sek, and M. I. Hossen, "Vehicle Re-identification System using Residual Network with Instance-Batch Normalization," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 267-282, 2026, doi: 10.33093/jiwe.2026.5.1.17.
- [18] H. Mahdin, "Editorial: Intelligent Systems and the Next Wave of Digital Innovation" *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 283-287, 2026, doi: 10.33093/jiwe.2026.5.1.18.
- [19] N. Zainal, M. S. Salleh, N. A. W. Sulaiman, A. Alazab, and N. L. Sulaiman, "Test Case Prioritization Using Ant Colony Optimization to Improve Fault Detection and Time," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 288-303, 2026, doi: 10.33093/jiwe.2026.5.1.19.
- [20] M. A. Abdirahim, A. S. B. H. Basari, M. B. Alazzam, M. S. B. Che Lah, R. B. Ahmad, and A. B. Mustapha, "Flood Disaster Preparedness and Response Using a Web-Based Integrated Flood Management System (IFMS)," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 304-334, 2026, doi: 10.33093/jiwe.2026.5.1.20.
- [21] A. F. Sharzizi, A. N. Sahadun, A. H. Disina, and H. Fernando, "Evaluating Accuracy Latency and Robustness of Face Recognition Models for Real Time Web Applications" *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 335-343, 2026, doi: 10.33093/jiwe.2026.5.1.21.
- [22] N. Zainal, M. A. S. M. Shahrom, M. F. Ab. Aziz, S. A. M. Mostafa, A. F. Kamaruzzaman, and N. B. Abd. Warif, "An Enhanced Glowworm Swarm Optimization for Minimizing Surface Roughness in Die Sinking Electrical Discharge Machining" *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 344-357, 2026, doi: 10.33093/jiwe.2026.5.1.22.

- [23] A. Afendi, M. U. Tariq, S. I. Ismail, and A. A. Ramli, "ANFIS and RBFNN Efficacy and Timescale Dependence in SPEI-Based Drought Prediction using Meteorological Inputs," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 358-374, 2026, doi: 10.33093/jiwe.2026.5.1.23.
- [24] S. J. Nisha, N. Salih, and W.-N. Mohd-Isa, "A Conceptual Framework on Development of Sign Language Chatbot for E-Commerce," *Journal of Informatics and Web Engineering*, vol. 5, no. 1, pp. 375-397, 2026, doi: 10.33093/jiwe.2026.5.1.24.

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