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## Editorial Preview for February 2025 Issue

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*Abstract* - Effective from Volume 3, JIWE has transitioned to a triannual publication release effort. Specifically, releases occur each February, June, and October. This change would thus ensure steady and timely publication of research articles in the fast-changing domains of informatics and web engineering. This issue contains a diverse collection of 24 papers that demonstrate the recent developments and innovative applications in various fields such as Information Systems (IS), Web Technologies, Artificial Intelligence (AI), Machine Learning (ML), Data Mining (DM), Blockchain, IoT, Cybersecurity, Healthcare and Software Engineering that persist in moulding the digital landscape.

*Keywords*— *Editorial Preview, Information Systems, Web Technologies, Artificial Intelligence, Machine Learning, Data Mining, Blockchain, IoT, Cybersecurity, Healthcare and Software Engineering*

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### PREVIEW

In this issue, we bring you 24 cutting-edge articles from 10 countries: Malaysia, India, Pakistan, UK, Indonesia, Vietnam, Sri Lanka, Jordan, China, and US.

Notably, some papers in this issue are selected from the 1st International Symposium on Information Technology and Web Engineering (SITWE 2024) (<https://www.mmupress.com/sitwe2024/>), where researchers showcased cutting-edge advancements and findings. SITWE 2024 took place via the web on 23–24 October 2024 and was organized by Journal of Informatics and Web Engineering together with MMU Press, as well as Center for Digital Innovations (previously known as the Center for Web Engineering).

This issue of the journal, which includes selected papers from SITWE 2024, attempts to capture some of the significant contributions that were presented at the symposium in line with our continued commitment to academic excellence and interdisciplinary collaboration. We hope that these works will contribute important reflections that connect theoretical underpinnings and practical realities and encourage conversations that will influence the trajectory of information technology and web engineering.

The papers in this issue are: Comprehensive Insights into Smart Contracts: Architecture, Sectoral Applications, Security Analysis, and Legal Frameworks [1], Predicting Short-Range Weather in Tropical Regions Using Random Forest Classifier [2], A Comparative Study of Oracle ERP Netsuite and Microsoft Dynamics 365 Contributions to Contemporary Business Development in India [3], Improved Accuracy for Heart Disease Diagnosis Using Machine Learning Techniques [4], Enhancing Financial Literacy: A Progressive Web Application Approach for Malaysian Youth [5], Social Engineering Threat Analysis Using Large-Scale Synthetic Data [6], Hyperledger Fabric Blockchain for Securing the Edge Internet of Things: A Review [7], Machine Learning Approaches for Detecting Vine Diseases: A Comparative Analysis [8], Implementing Identity-based Signature Schemes for Secure Data Transfer in Cloud Computing Environments [9], and IoT-Based Nerve Stimulator for Women's Safety [10].

To add to the list, these papers are also published in this issue: Lung Tumor Segmentation in Medical Imaging Using U-NET [11], A Hybrid Deep Learning VGG-16 Based SVM Model for Vehicle Type Classification [12], Early Identification of Parkinson's Disease Using Time Frequency Analysis on EEG Signals [13], DebugProGrade: Improving Automated Assessment of Coding Assignments with a Focus on Debugging [14], Optimising Phishing Detection: A Comparative Analysis of Machine Learning Methods with Feature Selection [15], Integrating Moral Values in AI: Addressing Ethical Challenges for Fair and Responsible Technology [16], Creating an Android-based Calisthenics Application to Assist Students in Improving Their Physical Fitness [17], Machine Learning Model for Predicting Net Environmental Effects [18], Fiber Break Prevention Using Machine Learning Approaches [19], Migraine Generative Artificial Intelligence based on Mobile Personalized Healthcare [20], Exploration of The Impact of Cyber Situational Awareness On Small and Medium Enterprises (SMEs) in Malaysia [21], Climate Change Analysis in Malaysia Using Machine Learning [22], Path To a Healthy Work-Life Balance: Mobile Application for Work and Personal Life Mastery [23], and Personalized Drug Recommendation System Using Wasserstein Auto-encoders and Adverse Drug Reaction Detection with Weighted Feed Forward Neural Network (WAES-ADR) in Healthcare [24].

Last but not least, we invite you to submit your ideas regarding topics that could be interesting to discuss (feel free to contact us to facilitate a thematic section in our regular publication), and we also encourage you to consider submitting articles to the Journal of Informatics and Web Engineering.

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Su-Cheng Haw: Writing;

## CONFLICT OF INTERESTS

No conflict of interests were disclosed.

## ETHICS STATEMENTS

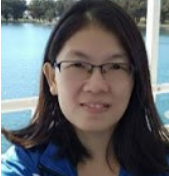
Our publication ethics follow The Committee of Publication Ethics (COPE) guideline. <https://publicationethics.org/>

**REFERENCES**

- [1] F. Mazlan, N.F. Omar, N.N.M.S. Nik Mohd Kamal, and A.A. Zainuddin, "Comprehensive insights into smart contracts: Architecture, sectoral applications, security analysis, and legal frameworks," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 1–17, 2025, doi: 10.33093/jiwe.2025.4.1.1.
- [2] S. Palaniappan, R. Logeswaran, A. Velayutham, and B. N. Dung, "Predicting short-range weather in tropical regions using random forest classifier," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 18–28, 2025, doi: 10.33093/jiwe.2025.4.1.2.
- [3] P. Subramanian and P. S, "A comparative study of Oracle ERP Netsuite and Microsoft Dynamics 365 contributions to contemporary business development in India," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 29–41, 2025, doi: 10.33093/jiwe.2025.4.1.3.
- [4] N. Joshi and T. Dave, "Improved accuracy for heart disease diagnosis using machine learning techniques," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 42–52, 2025, doi: 10.33093/jiwe.2025.4.1.4.
- [5] J.-X. Kok, S.-B. Ho, and C.-H. Tan, "Enhancing financial literacy: A progressive web application approach for Malaysian youth," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 53–69, 2025, doi: 10.33093/jiwe.2025.4.1.5.
- [6] S. Palaniappan, R. Logeswaran, S. Khanam, and P. Gunawardhana, "Social engineering threat analysis using large-scale synthetic data," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 70–80, 2025, doi: 10.33093/jiwe.2025.4.1.6.
- [7] M. H. Z. Hairul Nizam, M. A. Ahmad Nizam, M. H. Husaini Jummadi, N. N. M. S. Nik Mohd Kamal, and A. A. Zainuddin, "Hyperledger Fabric blockchain for securing the edge Internet of Things: A review," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 81–98, 2025, doi: 10.33093/jiwe.2025.4.1.7.
- [8] W. Ahmad, E. Azhar, M. Anwar, S. Ahmed, and T. Noor, "Machine learning approaches for detecting vine diseases: A comparative analysis," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 99–110, 2025, doi: 10.33093/jiwe.2025.4.1.8.
- [9] P. Osinuga, J.-J. Chin, and T. S. C. Lau, "Implementing identity-based signature schemes for secure data transfer in cloud computing environments," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 111–128, 2025, doi: 10.33093/jiwe.2025.4.1.9.
- [10] K. Revathi and W. Gracy Theresa, "IoT-based nerve stimulator for women's safety," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 129–139, 2025, doi: 10.33093/jiwe.2025.4.1.10.
- [11] J. Jayapradha, S.-C. Haw, N. Palanichamy, S. K. Thillaigovindhan, and M. Al-Tarawneh, "Lung tumor segmentation in medical imaging using U-NET," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 140–151, 2025, doi: 10.33093/jiwe.2025.4.1.11.
- [12] M. Imran, J. Usman, M. Khan, and A. A. Khan, "A hybrid deep learning VGG-16 based SVM model for vehicle type classification," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 152–167, 2025, doi: 10.33093/jiwe.2025.4.1.12.
- [13] T. Hasib, V. Vijayakumar, and R. Kannan, "Early identification of Parkinson's disease using time frequency analysis on EEG signals," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 168–183, 2025, doi: 10.33093/jiwe.2025.4.1.13.
- [14] A. Patel and H. Joshi, "DebugProGrade: Improving automated assessment of coding assignments with a focus on debugging," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 184–199, 2025, doi: 10.33093/jiwe.2025.4.1.14.
- [15] M. A. Daniel, S.-C. Chong, L.-Y. Chong, and K.-K. Wee, "Optimising phishing detection: A comparative analysis of machine learning methods with feature selection," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 200–212, 2025, doi: 10.33093/jiwe.2025.4.1.15.
- [16] K. Shah, H. Joshi, and H. Joshi, "Integrating moral values in AI: Addressing ethical challenges for fair and responsible technology," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 213–227, 2025, doi: 10.33093/jiwe.2025.4.1.16.

- [17] Restyandito, N. P. Wisnoewardhana, and D. Sebastian, "Creating an Android-based calisthenics application to assist students in improving their physical fitness," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 228–242, 2025, doi: 10.33093/jiwe.2025.4.1.17.
- [18] S. Palaniappan, R. Logeswaran, S. Khanam, and Z. Yujiao, "Machine learning model for predicting net environmental effects," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 243–253, 2025, doi: 10.33093/jiwe.2025.4.1.18.
- [19] Z. H. Ng, T. Connie, K. Y. Choo, M. K. O. Goh, N. A. Abdul Aziz, and H. Y. Ngo, "Fiber break prevention using machine learning approaches," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 254–274, 2025, doi: 10.33093/jiwe.2025.4.1.19.
- [20] M. T.-T. Yong, S.-B. Ho, and C.-H. Tan, "Migraine generative artificial intelligence based on mobile personalized healthcare," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 275–291, 2025, doi: 10.33093/jiwe.2025.4.1.20.
- [21] T. Chee Keong, S. K. Khan, and U. F. Khattak, "Exploration of the impact of cyber situational awareness on small and medium enterprises (SMEs) in Malaysia," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 292–306, 2025, doi: 10.33093/jiwe.2025.4.1.21.
- [22] A. Subramanian, N. Palanichamy, K.-W. Ng, and S. Aneja, "Climate change analysis in Malaysia using machine learning," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 307–319, 2025, doi: 10.33093/jiwe.2025.4.1.22.
- [23] E. Rahmani and Z. Che Embi, "Path to a healthy work-life balance: Mobile application for work and personal life mastery," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 320–331, 2025, doi: 10.33093/jiwe.2025.4.1.23.
- [24] J. Omana, P. N. Jeipratha, K. Devi, S. Benila, and K. Revathi, "Personalized drug recommendation system using Wasserstein auto-encoders and adverse drug reaction detection with weighted feed forward neural network (WAES-ADR) in healthcare," *Journal of Informatics and Web Engineering*, vol. 4, no. 1, pp. 332–347, 2025, doi: 10.33093/jiwe.2025.4.1.24.

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