Journal of Informatics and Web Engineering

Vol. 3 No. 3 (October 2024)

Editorial Preview

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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 particular October 2024 release contains 12 papers within the regular section that covers a broad range of application concerning Machine Learning (ML), Artificial Intelligence (AI), Data Mining (DM), Software Engineering, Recommender Systems, Cybersecurity, Healthcare, and other key areas in web engineering. Additionally, this edition presents a captivating collection of 7 papers curated by our Thematic Editor, Dr. Ji-Jian Chin, under the theme "Pervasive Computing." In his editorial, Dr. Ji-Jian Chin highlights cutting-edge research on the integration of computing into everyday environments. Moreover, these papers are aligned to some of the United Nations Sustainable Development Goals (SDGs), particularly SDG 3 (Good Health and Well-being) through advancements in healthcare technologies, SDG 9 (Industry, Innovation, and Infrastructure) through software and systems innovation research, and SDG 16 (Peace, Justice, and Strong Institutions) through contributions to privacy and cybersecurity research.

Keywords— Editorial Preview, Machine Learning, Artificial Intelligence, Data Mining, Recommender Systems, Cybersecurity, Software Engineering, Sustainable Development Goals

Received: 15 September 2024; Accepted: 01 October 2024; Published: 16 October 2024

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eISSN: 2821-370X

PREVIEW

In this issue, we bring you 12 cutting-edge articles in our regular section, along with 8 exciting contributions in the "Pervasive Computing" thematic section, including editorial insights from our Thematic Editor. These selected articles are from various countries such as Malaysia, India, Pakistan, Indonesia, Saudi Arabia, the United Kingdom, Thailand, China, Kuwait, Norway, Australia, and South Korea. These papers are: MOBITEST – A Software For Mobile-based Testing [1], Enhancing Cybersecurity Awareness through Gamification: Design an Interactive Cybersecurity Learning Platform for Multimedia University Students [2], Treatment Recommendation using Large Language Model Personalization [3], Performance Evaluation on E-Commerce Recommender System based on KNN, SVD, CoClustering and Ensemble Approaches [4], Review on Automated Storage and Retrieval System for Warehouse [5], Development of Virtual Reality Based Left Brain System [6], Comparative Analysis of Linear and Nonlinear sEMG Methods for Detecting Muscle Fatigue During Dynamic Biceps Curls [7], Pi Class – A Revolutionary Step Forward in Hybrid Class Management System [8], Comparative Evaluation of Machine Learning Models for Mobile Phone Price Prediction: Assessing Accuracy, Robustness, and Generalization



Journal of Informatics and Web Engineering https://doi.org/10.33093/jiwe.2024.3.3.21 © Universiti Telekom Sdn Bhd.

Published by MMU Press. URL: https://journals.mmupress.com/jiwe

Performance [9], Development of Robot Feature for Stunting Analysis Using Long-Short Term Memory (LSTM) Algorithm [10], Investigation on Understanding the Numeracy Capacity of Disabled Students using Enabling Technology Tools: Web Application, AR and UI/UX [11], and DDoS Attack Detection with Machine Learning [12].

The thematic section starts with an editorial preview: Editorial: Artificial Intelligence and Cybersecurity in Pervasive Computing [13].

"Pervasive computing integrates seamlessly into everyday life,

transforming our world with smart, interconnected technology."

The papers covered are: Sibling Discrimination Using Linear Fusion on Deep Learning Face Recognition Models [14], HybridEval: An Improved Novel Hybrid Metric for Evaluation of Text Summarization [15], Intelligent Abstractive Summarization of Scholarly Publications with Transfer Learning [16], Cyber-Securing Medical Devices Using Machine Learning: A Case Study of Pacemaker [17], Towards Analysable Chaos-based Cryptosystems: Constructing Difference Distribution Tables for Chaotic Maps [18], Conditional Deployable Biometrics: Matching Periocular and Face in Various Settings [19] and Survey of Literature on Cost Benefit Analysis for Cyber Risk Mitigation Measures in Offshore Wind [20].

Last but not least, we wish to invite your ideas and suggestions about what themes may be of interest (you are encouraged to contact us to lead a theme session in our regular issue), and we encourage you to think about contributing articles to the Journal of Informatics and Web Engineering.

ACKNOWLEDGEMENT

The authors received no funding from any party for the research and publication of this article.

AUTHOR CONTRIBUTIONS

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] A.A. Zaveri, R. Mashood, N. Faisal, M. Parveen, N. Sami, M. Nazar, S. Imtiaz, "MobiTest A Software for Mobile-Based Testing," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 1-20, 2024. doi: 10.33093/jiwe.2024.3.3.1.
- [2] A.K.A. Razack, M.F.M. Saad, "Enhancing Cybersecurity Awareness through Gamification: Design an Interactive Cybersecurity Learning Platform for Multimedia University Students," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 21-40, 2024. doi: 10.33093/jiwe.2024.3.3.2.

- [3] J. Jayapradha, Y. Kulkarni, L.G. Vadhanie, P. Naveen, E.A. Anaam, "Treatment Recommendation using BERT Personalization," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 41-62, 2024. doi: 10.33093/jiwe.2024.3.3.3.
- [4] W.E. Kong, T.E. Tai, P. Naveen, H.A. Santoso, "Performance Evaluation on E-Commerce Recommender System based on KNN, SVD, CoClustering and Ensemble Approaches," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 63-76, 2024. doi: 10.33093/jiwe.2024.3.3.4.
- [5] A.K.J Low, K.S. Sim, K.L. Lew, "Review on Automated Storage and Retrieval System for Warehouse," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 77-97, 2024. doi: 10.33093/jiwe.2024.3.3.5.
- [6] K.A. Teo, K.S. Sim, C.K. Toa, K.L. Lew, "Development of Virtual Reality-Based Left Brain System," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 98-120, 2024. doi: 10.33093/jiwe.2024.3.3.6.
- [7] T. Ming, L.W. Ang, S. Palaniappan, "Comparative Analysis of Linear and Nonlinear sEMG Methods for Detecting Muscle Fatigue During Dynamic Biceps Curls," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 121-132, 2024. doi: 10.33093/jiwe.2024.3.3.7.
- [8] Q. Hassan, N. Faisal, A.A. Zaveri, "Pi Class A Revolutionary Step Forward in Hybrid Class Management System," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 133-146, 2024. doi: 10.33093/jiwe.2024.3.3.8.
- [9] S.A. Lashari, M.M. Khan, A. Khan, S. Salahuddin, M.N. Atta, "Comparative Evaluation of Machine Learning Models for Mobile Phone Price Prediction: Assessing Accuracy, Robustness, and Generalization Performance," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 147-163, 2024. doi: 10.33093/jiwe.2024.3.3.9.
- [10] M.R. Abdurrahman, H. Al-Aziz, F.A. Zayn, M.A. Purnomo, H.A. Santoso, "Development of Robot Feature for Stunting Analysis Using Long-Short Term Memory (LSTM) Algorithm," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 164-175, 2024. doi: 10.33093/jiwe.2024.3.3.10.
- [11] V. Thakar, R. Thakar, P. Vyas, "Investigation on Understanding the Numeracy Capacity of Intellectual Disabled Students using Enabling Technology Tools: Web Application, AR and UI/UX," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 176-189, 2024. doi: 10.33093/jiwe.2024.3.3.11.
- [12] W.W. Tay, S.C. Chong, L.Y. Chong, "DDoS Attack Detection with Machine Learning," *Journal of Informatics and Web Engineering* vol. 3, no. 3, pp. 190-207, 2024. doi: 10.33093/jiwe.2024.3.3.12.
- [13] J.J. Chin, "Editorial: Artificial Intelligence and Cybersecurity in Pervasive Computing," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 233–255, 2024. doi: 10.33093/jiwe.2024.3.3.13.
- [14] R. Goel, M. Alamgir, W. Wahab, M. Alamgir, I. Mehmood, H. Ugail, A. Sinha, "Sibling Discrimination Using Linear Fusion on Deep Learning Face Recognition Models," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 214–2 32., 2024. doi: 10.33093/jiwe.2024.3.3.14.
- [15] R. Sarwar, B. Ahmad, P.S. Teh, S. Tuarob, T. Thaipisutikul, F. Zaman, N.R. Aljohani, J. Zhu, S.U. Hassan, R. Nawaz, A.R. Ansari, M.A.B. Fayyaz, "HybridEval: An Improved Novel Hybrid Metric for Evaluation of Text Summarization," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 233–255, 2024. doi: 10.3093/jiwe.2024.3.3.15.
- [16] F. Zaman, M. Afzal, P.S. Teh, R. Sarwar, F. Kamiran, N.R. Aljohani, R. Nawaz, M.U. Hassan, and F. Sabah, "Intelligent Abstractive Summarization of Scholarly Publications with Transfer Learning," *Journal of Informatics and Web Engineering* ng, vol. 3, no. 3, pp. 256–270, 2024. doi: 10.33093/jiwe.2024.3.3.16
- [17] S. T. Jimoh and S. Al-Juboori, "Cyber-Securing Medical Devices Using Machine Learning: A Case Study of Pacemaker," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 271–289. 2024. doi: 10.33093/jiwe.2024.3.3.17
- [18] J. S. Teh and A. Abba, "Towards Analysable Chaos-based Cryptosystems: Constructing Difference Distribution Tables for Chaotic Maps," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 290-301. 2024, doi: 10.33093/jiwe.2024.3.3.18
- [19] J. Kim, T.S. Ng, and A.B.J Teoh, "Conditional Deployable Biometrics: Matching Periocular and Face in Various Settings," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 302–313, 2024. doi: 10.33093/jiwe.2024.3.3.19.

[20] Y. H.-S. Kam, K. Jones, R. Rawlinson-Smith, and K. Tam, "In Search of Suitable Methods for Cost-Benefit Analysis of Cyber Risk Mitigation in Offshore Wind: A Survey," *Journal of Informatics and Web Engineering*, vol. 3, no. 3, pp. 314-328, 2024, doi: 10.33093/jiwe.2024.3.3.20.

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