

Managing Editor's Column

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Dear Readers,

It gives me great pleasure to announce the 13th J.UCS issue of 2025. I would like to thank all the authors for their sound research and the editorial board and guest reviewers for the extremely valuable reviews and suggestions for improvement. These contributions together with the support of the community and the generous support of the KOALA initiative enable us to run our journal and maintain its quality.

I would still like to expand our editorial board: If you are a tenured associate professor or above with a good publication record, please apply to join our editorial board. We are also interested in high-quality proposals for special issues on new topics and emerging trends.

In this regular issue, I am very pleased to present 6 accepted articles by 18 authors from 9 countries: Australia, Austria, Brazil, Chile, China, Iran, Malaysia, Spain, and Turkiye.

In a collaborative effort between researchers from Australia and Austria, Muhammad Saqlain, José M. Merigó, Keivan Amirbagheri, and Hermann Maurer provide a comprehensive bibliometric analysis of the Journal of Universal Computer Science (JUCS) from 1994 to 2024, employing the SPAR-4-SLR protocol with VOSviewer and Bibliometrix to examine publication patterns, collaboration networks, and thematic evolution. The findings reveal JUCS's strengthened global impact, intellectual connectivity, and transition toward modern computer science domains such as artificial intelligence, deep learning, and big data, underscoring its sustained relevance and adaptability over three decades.

Claudio Alvarez, Andres Carvallo, and Gustavo Zurita from Chile address in their research the growing orchestration load teachers face in real-time case-based learning discussions by introducing a low-footprint natural language processing approach that can run on standard hardware without requiring large-scale models. Expert evaluation shows that small pre-trained models, particularly BETO and the Universal Sentence Encoder, effectively identify relevant student responses while maintaining low computational cost and minimizing bias, enabling scalable and equitable AI support for educators in the Global South.

In a collaborative research effort between Malaysia and China, Yongbin Li, Xinyue Yang, Linhu Hui, Enlin Fu, and Stephanie Chua focus on Lung Nodule Detection. To reduce false positives on CT scans, the authors propose AMCF-CNN, a 3D attention-guided multi-scale cross-fusion network that effectively integrates local features and global contextual information through SimAM-Res and the Global Modeling Module. Evaluated on the LUNA16 dataset, AMCF-CNN achieves a CPM of 0.936 and a balanced accuracy of 0.983, outperforming most existing methods.

José de Oliveira Guimarães from Brazil focuses his research on aspects of metaprogramming in Cyan. Most compile-time metaprogramming languages allow unrestricted modifications to the in-memory representation of the base program by providing largely unconstrained access to the compiler's internal data structures. The Cyan metaprogramming system, in contrast, uses a sandboxed model that prevents errors caused by such unrestricted access while retaining most of the expressive power of other systems.

Vahide Nida Kılıç and Esra Saraç Eşsiz from Türkiye propose in their research a novel anomaly prevention framework that combines clustering-based nature-inspired algorithms with both node and content features to identify suspicious instances in communication networks. The approach advances the field by shifting from traditional anomaly detection to proactive prevention through the early classification of suspicious nodes, threshold-based risk assessment, and link analysis to flag potential anomalies before escalation.

Atefeh Parvin, Farahnaz Mohanna, and Masoumeh Rezaei from Iran discuss in their research a genetic-based square jigsaw puzzle solver. To address the challenge of distinguishing identically colored pieces from different objects in jigsaw puzzle solving, they propose a genetic algorithm-based solver that integrates a novel color and texture compatibility criterion using Sum of Squared Distances and Gabor filter features. This approach improves accuracy by 11.9% and 3.65% in direct and neighbor comparison criteria across 66 puzzles, offering a data-efficient solution for type 1, 2, and 3 square jigsaw puzzles.

Enjoy Reading!

Cordially,



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