EDITORIAL

Welcome to the special issue of the *South African Journal of Libraries and Information Science* (*SAJLIS*) for 2024. It is with great pleasure that we present this special issue of SAJLIS, dedicated to the proceedings of the 3rd International Federation of Library Associations (IFLA) IT Section Symposium on Artificial Intelligence (AI), hosted by the North-West University (NWU) Library and Information Service (LIS) on September 5-7, 2023, with registration and workshops beginning on 4 September 2023 (https://library.nwu.ac.za/artificial-intelligence-symposium-2023). Through the support and partnership with the South African Tourism Board, this symposium brought together a diverse group of scholars, practitioners, and industry leaders to explore the profound implications and opportunities that AI presents for libraries and information services in the context of the Fourth Industrial Revolution (4IR). It provided a platform to share experiences and expertise in AI and robotics and demonstrated mapping strategic priorities through different governance structures to contribute to innovative learning and increased research output. The symposium was held at The Feather Hill Hotel in Potchefstroom, providing a conducive environment for sharing knowledge and fostering collaborations.

Advancements in technology require libraries to reimagine their operations. Following the success of previous symposia at Wildau Technical University of Applied Sciences and the University of Pretoria, the NWU LIS hosted the third IFLA IT Section and AI Special Interest Group (SIG) symposium. This event continued the trend of promoting interdisciplinary collaborations and innovations in AI within the library and information science community. The publication covers the symposium themes. The main theme of the symposium was "Artificial Intelligence in Teaching, Learning & Research: Promoting Digital Access to Information through Automation." The subthemes included:

- Artificial Intelligence: Robotic Process Automation, Humanoid Robots, Natural Language Processing, Speech Processing, Machine Learning, and Deep Learning.
- Robots in Industry and Education: AI-assisted Learning, Intelligence for Applications, Agile Processes for Personalized Learning, Library Chatbots, AI Ethics and Safety, and Preservation of Indigenous Knowledge.
- E-learning: E-Learning Tools, Virtual Learning Environments, Web-Based Learning, Social Interactions, and Gamification.
- Machine Visualization: Human-Computer Interaction, Modelling and Simulation, Extended Reality, and Image Processing.
- Infrastructure & Computation: AI and Security Systems, AI in the Cloud, Blockchain, Smart Sensor Networks, and Communication Systems.
- Technology & Trends: Digitalisation, Big Data, Data Analytics, Internet of Things, and Data Ethics and Innovation.
- AI Literacy and Governance: AI Strategy in Organisations, Workforce Development, Competency Building, and Developing Digital Literacy Courses for AI.

The 4IR, characterised by the digital transformation of organisations such as universities, is transforming the landscape of teaching, learning, and research. This revolution is driven by new technologies combined with changes in culture and workforce dynamics. The primary objective of this symposium was to foster partnerships, networking, and collaborations among different organisations to develop e-services that support these core activities. The emphasis on integrated learning and providing users with enhanced and authentic learning experiences were key themes.

In South Africa, while 64% of academic libraries have responded positively to the changing environment, only a small fraction has adopted AI and robotics as self-help services. The NWU has been at the forefront of this transformation, implementing various digital tools, including a library chatbot and robotics, to improve efficiency and effectiveness. This symposium provided a platform for sharing these advances and explore further innovations in AI.

The publication promotes internationalisation as it engages various stakeholders, including the IFLA IT Section, the AI SIG, NWU departments, and national and international authors from institutions of higher learning and organisations. These collaborations aim to promote high standards of service, innovation, and accessibility in libraries around the world.

As you explore the contents of this special issue, we hope that you find the articles both informative and inspiring. It is our sincere hope that this collection will stimulate further research, foster new ideas, and encourage continued dialogue within the library and information science community regarding the transformative potential of AI.

Thank you for your interest in this special issue. We look forward to your feedback and to continued growth and innovation in the exciting intersection of AI and library science.

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