

Editorial

We publish the last issue of this volume of the **Journal of Information Organisation** with the following research.

In the opening paper, “**Correlation Structure Among Key Constructs in Online Blended Learning: A Multivariate Analysis**,” the authors studied the integration of Gaussian Mixture Models (GMMs) and the Expectation-Maximization (EM) algorithm into a blended learning framework centered on Massive Open Online Courses. They used GMMs to model complex learning behaviours and environmental variations, and employed the EM algorithm to estimate model parameters via iterative unsupervised learning. The experiments they conducted confirmed that the studied courses demonstrated that blended MOOC-based learning increases student satisfaction, motivation, and outcomes, despite minor challenges like internet access or digital literacy.

In the second paper, “**New algorithms for Embroidery Patterns Using Feature Extraction and Pattern Recognition**,” the author developed a model for traditional embroidery patterns using a linear classifier, a type of intelligent algorithm in computer science. The study used an AI-driven approach to automate and enhance pattern innovation while preserving cultural essence. By integrating machine learning with traditional craftsmanship, the system helped to modernize embroidery design and contributed to the preservation and evolution of cultural heritage. The authors suggested further exploring alternative algorithms to refine performance further and broaden the application scope.

In the last paper, “**A multi-feature-based 3D Model for Personalized Teaching in Higher Education**,” the author suggested a new model to enhance university level table tennis instruction by leveraging a hierarchical clustering intelligent algorithm. The algorithm they introduced preprocessed player movement data using background difference and shadow removal techniques, then extracted features via Radon transformation and wavelet analysis. The experimental results showed that this approach outperformed traditional algorithms such as k-means++, CURE, and CBDP especially in handling complex, non-spherical cluster shapes.

We hope to bring more research in the forthcoming volume.

Editors