Editorial

We are pleased to present the third issue of this volume of the ***Journal of Intelligent Computing***, which features the following original research contributions.

The opening paper, titled ***"Exercise, Sleep, Nutrition, and Digital Behavior as Predictors of Cognitive Engagement and Learning Effectiveness: A Neuroplasticity-based Analytical Framework,"*** investigates the dynamic interplay between lifestyle behaviors specifically exercise, sleep, and nutrition and digital habits such as screen time and sedentary behavior. Using a neuroplasticity-oriented framework, the authors examine a six-dimensional construct comprising cognitive engagement, physical activity, sleep, nutrition, digital distraction, and learning effectiveness, applying multi level statistical methods to analyze these relationships. Their findings validate a multidimensional neuroplasticity model and suggest that cognitive resilience and academic achievement are fundamentally tied to holistic lifestyle practices. The study highlights the importance of embedding neurobiological principles into contemporary educational technologies and cognitive rehabilitation strategies to enable adaptive, personalized learning environments.

The second paper, ***"Exploratory Factor Analysis and Random Forest Modeling of ROI Determinants in Robotic Process Automation (RPA) Implementation,"*** explores the factors influencing Return on Investment (ROI) in enterprise RPA deployments. The authors employ an integrated analytical framework combining Exploratory Factor Analysis (EFA) with Random Forest regression modeling. Drawing on project-level data that includes five key performance indicators number of robots deployed, budget (USD), annual savings (USD), ROI (%), and employee hours saved the research uncovers underlying latent structures and assesses the relative predictive strength of financial and operational metrics on automation returns. The results indicate that successful RPA initiatives should emphasize measurable financial gains and operational efficiency rather than simply expanding automation scale.

The final paper, ***"Analysis of DAG Structure and HEFT Scheduling Efficiency Across Graph Sets,"*** examines the relationship between Directed Acyclic Graph (DAG) structural properties and scheduling performance under the Heterogeneous Earliest Finish Time (HEFT) algorithm in heterogeneous computing environments. The study utilizes a range of multivariate statistical techniques, including Principal Component Analysis, K-means clustering, hierarchical clustering, multiple regression, and Random Forest modeling, to identify latent structural dimensions that govern execution behavior. The analysis reveals three dominant variance components that account for 97.6% of total variability. These insights underpin the development of Cluster Aware HEFT (CA-HEFT), an adaptive scheduling architecture that pre-classifies incoming workflows and applies customized prioritization and processor selection strategies. This work contributes an empirical taxonomy of DAG workloads, establishes the critical path as the principal performance bottleneck, and offers a foundational step toward structure aware, adaptive scheduling in heterogeneous distributed systems.

We trust that the research presented here will enrich the current body of knowledge in intelligent computing and inspire further inquiry in these dynamic areas.

Editors