Editorial

We bring the third issue of the **Journal of Multimedia Processing and Technologies** with the research below.

In the opening paper, "**Deep Learning Based Detection of AI-generated Synthetic Images for DigitalForensics**," the authors reviewed the potential application of deep learning technologies, specifically Convolutional NeuralNetworks (CNNs), in detecting AI-generated synthetic images. Further, they discussed several conventional anddeep learning-based approaches, compared their performance, and indicated the significance of lightweightCNN models in maintaining computational efficiency without sacrificing accuracy. Finally, they codified the application of digital forensics in preventing misinformation and malicious acts
involving synthetic images.

In the following paper, "**Fixed-Parameter Tractability of Successor-Invariant First-Order Logic on Graphs Excluding Topological Subgraphs**," the authors established that model checking for successor-invariant first-order logic (FO) is fixed-parameter tractable on graph classes that exclude a fixed graph H as a topological subgraph. The findings contributed to algorithmic meta theorems, highlighting how structural graph propertiescan be leveraged in logic-based algorithm design.

In the last paper, "**Multimedia Design of an Eco-Friendly Plan for the Landscape Environment in the Rural Region**," the authors studied how optimization design techniquescan enhance the green architectural landscape environment in these villages. By verifying the cultural traitsand environmental challenges faced by traditional villages and integrating both domestic and internationalresearch advancements, a method grounded in the niche genetic algorithm is introduced. This work provided a method and strategy for the sustainable development of traditional villages.

We hope that these papers generate interest among the readers.

Editors