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Editorial

This issue contains many newer modelling approaches for various applications.

For mastering the back-propagation neural network architecture the authors *Reddy* and *Gurpreet Singh* in their paper on **“E-Learning Tool for Backpropagation Neural Network Architecture”** have presented an e-Learning tool. Based on the BP-NN-architecture, the e-Learning tool is tailored for mastering, class room teaching, and test generation. The tool the authors have used the MS Visual C++ has good functionality.

Ouafek Naouel and *Kholladi Mohamed-Khireddine* in their paper on **“An Image inpainting Algorithm Based on K-means Algorithm”**, has addressed the work restoring the damaged images which is crucial in the process of image inpainting. They proposed a new algorithm that combines Kmeans algorithm and the partial differential equation (PDE).

Mutation Testing as a fault-based software testing technique was not considered due to its high cost, say the authors *Falah Bouchaib*, *Bouriat Salwa* and *Achahbar Ouidad* in their paper on **“Effectiveness of 10-Selective Mutation Testing Technique: Case of Small Programs”**. The authors in this paper have evaluated the effectiveness of 10-selective mutation approaches. With the help of the experimental testing they have concluded that the cost of mutation testing can be minimized by selecting a subset (10 operators) from mutation operators.

Modeling and performance analysis of the media access control layer are significant in the technology dependent world the authors *Hatm Alkadeki*, *Xingang Wang* and *Michael Odetayo* view in their paper on **“A New Performance Evaluation model for IEEE 802.11DCF”**. In their paper they proposed a new performance evaluation by creating a new mathematical model to compute a packet transmission probability for IEEE 802.11 DCF. Their enhanced model helped to achieve the highest accuracy performance evaluation of IEEE 802.11 DCF, the author claim.

In the last paper a new approach to identify fractional differentials equations is proposed by *Abir KHADHRAOUI*, *Khaled JELASSI* and *Jean-Claude TRIGEASSOU*. The paper **“Identification of a fractional order model by a least squares technique: Hn model”** has presented a linear model to estimate system parameters, as well as non-integer orders from temporal data (Hn model). The results have demonstrated the validity and effectiveness of the model the authors claim.

Hope the papers are interesting to read and also to cite.

Editors