## Editorial

With this issue, we complete the third volume of **Digital Signal Processing and Artificial Intelligence.** 

In the opening paper, "Digital Music Creation System Based on Recursive Neural Network Using AI Algorithm," *Tao Z Hang* uses a recursive neural network with a loop structure to adaptively process sequence data. The author concludes that various factors, such as the quality of training data, the settings of model parameters, and the stylistic characteristics of the music, influence the predictive results of recursive neural networks.

In the next paper, "Educational Management Information Architecture under the Deep Learning Mathematical Model," the author, *Han Min*, analysed how to use artificial intelligence to establish an effective course management system to disseminate our courses effectively. The author found significant changes in the teaching of courses through a systematic exploration of deep learning mathematical models.

Ning Fu and Xia Peng's next paper, "Application of Dynamic Intelligent Simulation Technology in Dance Teaching," explored the feasibility of applying intelligent technology to dance teaching using the recognition model of 3D Convolutional Neural Networks (CNNs). They validated a model based on 3D CNNs using the MSRAction3D dataset. They found that this model can provide dance teachers with accurate movement recognition and personalized guidance, improving teaching effectiveness.

In the fourth paper, "The Practical Effects of Political Education Courses Based on Artificial Neural Network Model," Xiaojuan Chen explored the practical effects of college educational courses based on a computer artificial neural network model. The article first established a "three-dimensional index system" for evaluating educational courses in colleges based on the characteristics of artificial neural networks. Secondly, it introduced the computer artificial backpropagation (BP) neural network evaluation method. The simulation experiments show that the model's actual output is very close to the expected results, and satisfactory results are achieved when testing the model with sample data.

In the last paper, "A Case Study of Traditional Chinese Martial Arts Inheritance Based on Deep Learning," the author, *Qian Ding*, studied the development process of traditional Chinese martial arts and achieved this goal using deep learning methods. The author concluded that by using deep learning, we can accurately identify the characteristics of various traditional Chinese martial arts and thus better evaluate their value.

We will bring more research in the next volume.

## **Editors**