**ABSTRACT**

**IEEE BASE PAPER ABSTRACT:**

Music genres are categories that classify music based on its common traditions and customs. These genres can enhance the enjoyment of music by providing listeners with a way to categorize and understand the music. When used constructively, it helps to better understand the art form, to recognize innovation and, above all, to improve the ability to judge quality. The main goal of this work is to study the different behaviors of musical genres based on their spectral representations and create an automated system for classification. Collecting the properly classified music dataset (i.e., GTZAN Music Genre) the feature-map of the data that is extracted is fed to the neural network model for evaluation. Accuracy of training, testing and validation is acquired. Along with that validation losses are reduced to an extent. The evaluation matrix is also computed. After the model is trained, it is deployed to the server along with a Flask-based REST API for easy access and use of the trained model for classification.

**OUR PROPOSED ABSTRACT:**

Music genres play a vital role in organizing and understanding music based on shared characteristics and traditions. The ability to accurately classify music genres not only enhances the overall music experience but also enables better evaluation of artistic innovation and quality. In this project, we present an enhanced music genre classification system utilizing an Artificial Neural Networks Model (ANN Model). To accomplish this, we collected a comprehensive and properly classified music dataset, such as the widely-used GTZAN Music Genre dataset. By extracting spectral representations of the music data, we generated feature maps which were then utilized for training the ANN Model. The model exhibited impressive performance with a training accuracy of 97% and a validation accuracy of 89%, highlighting its effectiveness in accurately classifying music genres. Furthermore, we focused on minimizing validation losses to optimize the model's performance. The evaluation matrix was computed to provide a comprehensive assessment of the system's classification capabilities. To facilitate easy access and utilization of the trained model for classification, we deployed it on a server along with a user-friendly Flask Web Framework. Our proposed system not only outperforms the existing system based on Convolutional Neural Networks, but also offers a more advanced and accurate solution for music genre classification. With its high training and validation accuracies, our system showcases its potential for providing users with a reliable and efficient tool to categorize and explore the diverse world of music genres.