ABSTRACT

Electronic Dance Music – colloquially called EDM – is a class of music that produced fully by using Digital Audio Workstation (DAW), software that is widely used by Disc Jockey (DJ) and electronic music producers to record, edit, and produce music. DJs mix EDM songs that are of the same or similar genre, either done live (Live Mixing) or behind the stage (Studio Mixing). Especially for studio mixing, a DJ compiles and merges a playlist and makes it an intact mix of long duration, which is then used at live performance of EDM concerts or festivals. If there is a system that can determine EDM in each genre, it will greatly help producers and DJs while compiling playlists and making mixes.

This Final Task describes an approach to classify the five main genres of EDM using Artificial Neural Network (ANN). The planned Final Task would extract several melodic and rhythmic features from a dataset of 250 songs and used these features to train the Backpropagation Neural Network (BP-NN).

The system modeled in this Final Task yields above 70% classification accuracy. The performance of this classifier system is tested based on the number of correct classifications by reviewing changes in parameters that directly affect system performance. The accuracy of the system measured based on the representation of Confusion Matrix, which is an objective measurement method

***Key Words** : Digital Signal Processing, Electronic Dance Music, Music Genre Classification, Speech Recognition, Backpropagation Neural Network, Machine Learning.*