KESHAV MEMORIAL INSTITUTE OF TECHNOLOGY
Narayanaguda, Hyderabad

Department of Computer Science and Engineering

Machine Learning : Music Predictor

Abstract:

Music is a greatest form of relaxation to human beings, which helps them relax, relish and rejuvenate. We humans in most of the times have a small idea of a music but are unable to develop into something meaningful and memorable. Thus we make it possible with help of a LSTM or a RNN.

Long short-term memory (LSTM) is an artificial recurrent neural network (RNN) architecture used in the field of Machine/Deep Learning. It can not only process single data points, but also entire sequences of data like speech or video. A common LSTM is composed of a cell , an input gate, an output gate, and a forget gate. The cells remember values over arbitrary time intervals and three gates regulate the flow of information into and out the cell. LSTM networks are well-suited to classifying, processing and making predictions based on time series data, since there can be encountered when training traditional RNN's. This project uses the predicting ability of LSTM to predict music based on the sample input music data by applying LSTM and generate our own music.

Name : N. Sai Sanjay - 17BD1A0531
G.V.S Neel Lohit - 17BD1A052H
K.Ashrith Srivatsav - 17BD1A052V
S.Sharan Kumar - 17BD1A053G
Branch : CSE
Section : B