Rokadep. P, 2022, 10:3
ISSN (Online): 2348-4098
ISSN (Print): 2395-4752

A Comparative Study of Feed Forward neural networks, Genetic Algorithm and Multimodal Deep Learning for Movie Recommendation

Mr. Rokadep. P., Miss. Gaikwad T.B., Miss. Kulkarni G.P.
Department of Information Technology,
Snd College of Engineering and Research Center, Yeola
Savitribai Phule Pune University
prakashrokae2005@gmail.com, gaikwadtejal1999@gmail.com, kulkarnigaytri0720@gmail.com

Abstract- Expression Reviews in the form of sentiments or rating for item used or movie seen is the part of human habit. These reviews are easily available on different social websites. Based on the interest pattern of user, it is important to recommend him the items. Till today's, a lot many recommendations System are designed using several machine learning algorithms. Still, faster convergence speed, prediction accuracy, suitable recommendation system that must be resolved using hybrid algorithm. In this report we propose a system that uses Feed Forward Neural Network. In this research we obtained for proposed technique are compared using the testing parameters like precision, recall, accuracy, mean absolute error with the result of feed forward neural network, multi modal deep learning, genetic algorithm.

Keywords- Fake reviews, Prediction, recommendation system, artificial neural network, Genetic algorithm, Neural Network, Precision, rec.

I. INTRODUCTION

People are strongly connected to social media for sharing their emotions and reviews on different websites. These emotions are in the form of sentiments or ratings for a product or service. As a result, a huge amount of data is generated and is being studied to predict, recommend a user any product or service for his interest. The movie rating database with users and different parameters for movies is available on several popular websites like Kaggle.

Decisions made by support of multiple stronger historical impressions to resolve an issue are always superior to the decisions made with single impression by any user. Rather than collecting all of the reviews or ratings, only the users having stronger relevance of ratings between them are collected.

Many researchers have taken efforts to enhance recommendation system using different machine learning techniques like GA, Neural Network (NN), Support Vector Machine (SVM) and many more.

II. PURPOSE OF PLANNED SYSTEM

Recommender systems are information filtering tools that aspire to predict the rating for users and items, pre-dominantly from big data to recommend their likes. Movie recommendation systems provide a mechanism to assist users in classifying users with similar interests.

The purpose of a recommendation system basically is to search for content that would be interesting to an individual. Moreover, it involves a number of factors to create personalized lists of useful and interesting content specific to each user/individual.

III. PROPOSED SYSTEM

A neural network is a network or circuit of biological neurons or, in a modern sense, an Artificial Neural Network, composed of Artificial Neurons or nodes. [1] Thus, a neural network is either a biological neural Network, made up of biological neurons, or an artificial neural network, used for solving Artificial

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Intelligences (AI) problems. The connections of the biological neuron are modeled in artificial neural networks as weights between nodes.

A positive weight reflects an excitatory connection, while negative values mean inhibitory connections. All inputs are modified by a weight and summed. This activity is referred to as a linear combination.

Finally, an activation function controls the Amplitude of the output [2]. For example, an acceptable range of output is usually between 0 and 1, or it could be −1 and 1. These artificial networks may be used for Predictive modeling, adaptive control and different emotion recognition from approaches to make the speech is proposed to movie.

Find relevant movies applications where they can be trained via a dataset. Self-learning resulting from experience can occur within networks, which can derive conclusions from a complex and seemingly unrelated set of information.[2]

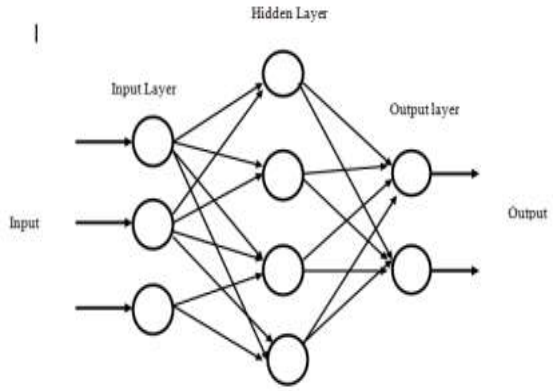

Fig 1 .Working Diagram of NN.

IV. LITERATURE REVIEW

In this article, our aim is to reduce the human effort by suggesting movies based on the user interests. Developed and evaluated A Improve pre-processing hybrid recommender system that combines content-based Filtering, through the training of neural network classifiers, with collaborative Filtering.

Proposed a review rating prediction framework using linguistic rules while deep learning [3]. In this paper movie recommendation based on worked on for customers. Recognition of good as possible. We emotion is always a difficult problem. [5]

V. DATASET

A system can work based on such types of data as content, historical data, or user data involving views, clicks, and likes.

The data used for training a model to make recommendations can be split into several categories. This dataset contains user ratings for movies of different genres.

VI. CONCLUSION

This recommendation system recommends different movies to users. Since this system is based on a collaborative approach, it will give progressively explicit outcomes contrasted with different systems that are based on the content-based approach. Content-based recommendation systems are constrained to people; these systems don't prescribe things out of the box.

These systems work on individual users 'ratings, hence limiting your choice to explore more. While our system which is based on a collaborative approach computes the connection between different clients and relying upon their ratings, prescribes movies to others who have similar tastes, subsequently allowing users to explore more.

It is a web application that allows users to rate movies as well as recommends them appropriate movies based on other's rating.

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