A Project Report on

# Tv Program Recommendation

by

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Under the Guidance of

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## Approval Sheet

This Project Report entitled *“Tv Program Recommendation”* Submitted by *“Suraj Shetty ”(16102007),“Akshay Udeg”(16102016),“Akshay Rathod”(16102010)* is approved for the partial fulfillment of the requirement for the Mini Project .

Ms. Brinal Colaco

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Head Department of Computer Engineering

Date:11/04/2019

## CERTIFICATE

This is to certify that the project entitled *“Tv Program Recommendation”* submitted by *“Suraj Shetty” (16102007), “ Akshay Udeg” (16102007), “ Akshay Rathod” (16102010)* for the partial fulfillment of the requirement for Mini Project is a bonafide work carried out during academic year 2018-2019.

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Place: A. P. Shah Institute of Technology, Thane

Date:11/04/2019

## Declaration

We declare that this written submission represents our ideas in our own words and where others’ ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that We have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified a idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

———————————————

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**Abstract**

With the development of science and technology, more people especially young teenagers do not want to pay more attention to TV shows. Nowadays the challenge of such industry is how to attract the audience's attention, so as to improve the audience rating of TV shows and movies. This paper proposes a recommendation system, which can improve audience rating. In this system we have used dataset of 5000 movies. This system uses two type of recommendation system 1: Demographic 2: content based. Demographic system uses IMDB formula to find top popular movies next in this system system we use countvectorizer and cosine similarity to find movies similar to users likes

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# Keywords

1.Recommendation System

2.TRP rating

3.Netflix Shows recommendation

4.Data Mining

5.DataSet

# 1-Introduction

# With the development of mobile Internet, the TV industry is facing threats and challenges. This is because Big Data is changing the industry. The primary task of TV industry like Netflix is how to take the advantage of Big Data technology.

For Netflix programs, audience rating is the metrics whether the program is good or not. The more time the audience is watching the particular show, the more popular the show is for the Audience.

This paper proposes a TV program recommendation system. The system is based on Big Data technology and Data Mining and Analytics which can automatically push programs to audience according to their hobbies.

This program recommendation system is designed to improve audience rating, and catch the attention of audiences. The

system is based on massive user data, and data mining algorithms to analyze the user's interests.

# 2-Literature Review

***1.Tv program recommendation system based on big data:***

**DOI:** [10.1109/ICIS.2016.7550923](https://doi.org/10.1109/ICIS.2016.7550923) :

*There are errors of program ratings recommendation*system, and the program list is affected by human emotion as well. Our Program Recommended system based on Big Data reasonably gives solution to those drawbacks.

# 2. An improved approach for movie recommendation system:

**DOI:** [10.1109/I-SMAC.2017.8058367](https://doi.org/10.1109/I-SMAC.2017.8058367)

Through Data Analytics the watch time of particular Human-Machine can be used to determine the type of shows user like to watch.

**3-Data Analysis and Visualization**

We have divided the project in three part:

1. Collected the Data Set
2. Analyzed The data and have implemented the Top 5 movies
3. Program Recommendation

In this we have analyzed the dataset and accordingly selected the essentials features for Visualization and the rating of the movies.

For Data Recommendation we have used an algorithm of count vectorizer and cosine similarity to implement the data recommendation more Efficiently.

We have used Content Based Filtering technique to implement the recommendation

Technique

# 4-Result

Data Visualization and Basic Recommendation is implemented using Content Based Filtering in

which we have used libraries like count vectorizer and cosine similarity to efficiently implement the

recommendation system.

# 5-Conclusions and Future Scope

In future, we will implement Graphical User Interface and will work on increasing Accuracy and we will do Data Cleaning Of the dataset which contains more number of data of movies.

# Bibliography

1. Oh J, Sung Y, Kim J, et al. Time-Dependent User Profiling for TV

Recommendation[C]//Cloud and Green Computing (CGC), 2012 Second

International Conference on. IEEE, 2012: 783-787.

2. Verma J P, Patel B, Patel A. Big Data Analysis: Recommendation

System with Hadoop Framework[C]//Computational Intelligence &

Communication Technology (CICT), 2015 IEEE International

Conference on. IEEE, 2015: 92-97.

# Appendices

Detailed information, lengthy derivations, raw experimental observations etc. are to be presented in the separate appendices, which shall be numbered in Roman Capitals (e.g. Appendix I). Since reference can be drawn to published/unpublished literature in the appendices these should precede the Literature Cited section.

## Appendix-A: Download and Installation

[1] <https://www.anaconda.com/distribution/>

### Acknowledgement

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