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MOVIE RECOMMENDATION SYSTEM: A REVIEW

Sweta Sharma
Assistant Professor
Computer Science Engineering
Arya Institute of Engineering and Technology, Jaipur, Rajasthan

Satish Kumar Alaria
Assistant Professor
Computer Science Engineering
Arya Institute of Engineering and Technology, Jaipur, Rajasthan

Shivani Modi
Asst. Professor
Computer Science Engineering
Arya Institute of Engineering and Technology, Jaipur, Rajasthan

Bhanu Pratap
Science Student
Bhuvnesh Bal Vidhyalaya, Kota, Rajasthan

ABSTRACT

Whether we are choosing a series on an OTT platform or searching for a movie, online recommendation engines have influenced our decisions. They are far from perfect and are still very much in the early phases of development. Specifically, we provide bandy movie recommendation algorithms in this study. Furthermore, we discuss key exploratory articles that have helped these systems overcome certain challenges and critically evaluate some work on movie recommendation systems. Even though there have been improvements, recommendation systems still require effort to improve their ability to provide reliable suggestions for a larger variety of operations.

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KEYWORDS: Recommendation System, Suggestion, pictures, Hunt, Machine literacy, Recommender.

INTRODUCTION

The exponential advancement of technology has resulted in a significant rise in the volume of information. We use machine learning to handle these enormous volumes of data as it automates the creation of analytical models. Three main categories may be used to categorize early machine learning classifications: supervised learning, unsupervised learning, and reinforcement learning. Without being expressly taught to do so, machine learning algorithms create a model using sample data, commonly referred to as training data, in order to generate predictions or judgments. Recommendation systems, speech recognition, email filtering, computer vision, and many more fields where it is difficult or prohibitive to create standard algorithms to do the essential tasks are applications for machine learning methods. Whether a person is using the internet to watch a movie on demand or make a purchase from an e-commerce site, it is important to examine the architecture of the recommendation system. We frequently rely on suggestions from other people, whether they are derived from analysis of in-depth surveys or personal recommendations. People frequently utilize online recommender systems to choose things that are relevant to their choices. Recommendation systems are software tools and procedures that help a group of people find relevant and educated suggestions for goods or services that they might find interesting.

PROBLEM STATEMENT

We strive to build a movie recommendation system that aids individuals in finding movies of their interest because we waste our quality time looking for movies, which is the impetus behind this project.

OBJECTIVES

1. To create a machine learning-based movie recommendation system.
2. The users' search time will be cut down and their likely shows will be provided by the movie recommendation system.

SYSTEM ARCHITECTURE

Overview of the Proposed Architecture

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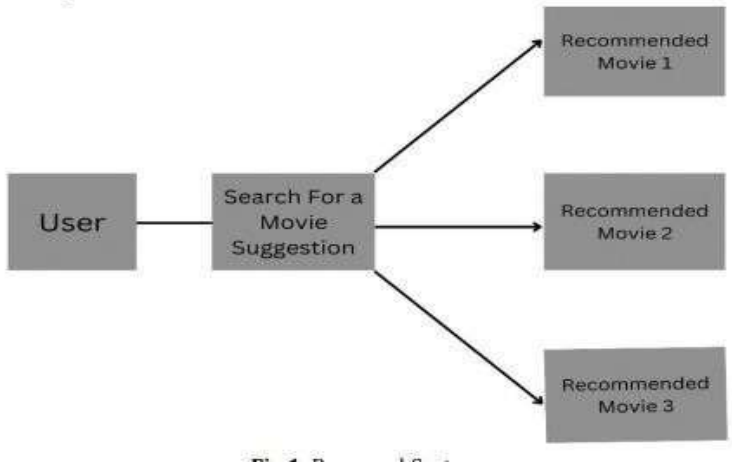

Fig.2. System architecture

Three elements make up the proposed system: a user, a gateway for movie suggestions, and the system administrator. Each of the system's aforementioned components has its own significance. The following is a discussion of each of their distinct tasks and functions:

- User: The user will look up the movie of his or her choosing or recommendation. Following his search, the user will receive the results or recommendations.
- A recommendation framework The system will produce suggestions or recommendations based on the user's search.
- PROPOSED OUTCOME

Users can look up his film.

The user will receive a recommendation, users
will receive recommendations.

APPLICATION OF RECOMMENDATION SYSTEM

E-Commerce:

Product recommendations: Making suggestions for products based on consumer interests, purchasing history, and behaviour.

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Cross-selling and upselling are strategies for increasing average order value by recommending related or complementary products.

Personalized Offers:

Giving certain users their own discounts or promotions.

Streaming content Offering individualized recommendations for movies, TV series, documentaries, and other media.

Making playlists or making song recommendations based on listener interests and history. on social media

Friend recommendations:

Making suggestions for potential connections based on shared acquaintances, hobbies, or interests. displaying blog entries, articles, or videos that are relevant to a user's interests. Vacationing and Hospitality

Hotel & Accommodation Recommendations:

Making lodging recommendations based on preferences, budget, and location.

Planning a trip's itinerary:

Providing users with advice on activities, eateries, and attractions.

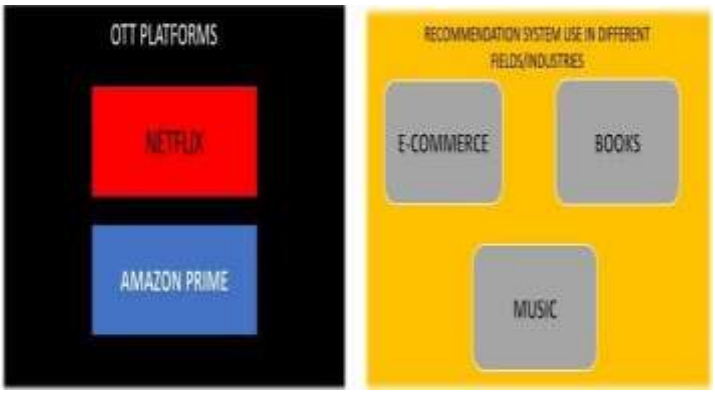

Fig.2. **OTT Platform Recommendation System**

CONCLUSION

In this research, we proposed a machine learning-based method for movie recommendations. It gives a user the option to select from a list of specified criteria and then makes movie recommendations for him based on the weighted average of those factors. Since there is no right or wrong advice in our system—it is merely a matter of

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opinions—evaluating performance is a challenging procedure. When we did informal evaluations of a small group of users, they gave positive feedback. In order for our system to generate more insightful results, we would like to have more data available. We also want to compare the results of applying various machine learning and clustering methods.

FUTURE SCOPE

The usefulness of recommender systems, which may be a very useful tool in a business's toolbox, will increase with future developments. One use case is the capability to detect important transactions, predict seasonal purchases based on suggestions, and offer customers better recommendations that can enhance retention and brand loyalty. The majority of businesses will benefit from recommender systems, thus I strongly encourage everyone to learn more about this fascinating area.

REFERENCES

1. "Movie Recommendation Systems: A Brief Overview", Nisha Sharma and Mala Dutta, July 2020.
2. "Movie Recommendation System Using Cosine Similarity and KNN", June 2020, by Gaurav Srivastav, Sargam Maurya, Tanisha Tripathi, and Tushar Narula.
3. Aishwarya P, Anup Jung Shah, and Ashrita Kashyap, "A Movie Recommender System: MOVREC Using Machine Learning Techniques", 2020
4. Singh, A., Gupta, V. K., Yadav, D. K., & Kumar (2015). The International Journal of Computer Applications, 124(3), 7-11. A movie recommendation system: Movrec.
5. Mario Munoz-Organero, Carlos Delgado Kloos, Gustavo A. Ramez-Gonzalez, and Pedro J. Munoz-Merino.
6. IEEE Pervasive Computing, 2010: "A Collaborative Recommender System Based on Space-Time Similarities"
7. R. K. Kaushik Anjali and D. Sharma, "Analyzing the Effect of Partial Shading on Performance of Grid Connected Solar PV System", *2018 3rd International Conference and Workshops on Recent Advances and Innovations in Engineering (ICRAIE)*, pp. 1-4, 2018.
8. R. Kaushik, O. P. Mahela, P. K. Bhatt, B. Khan, S. Padmanaban and F. Blaabjerg, "A Hybrid Algorithm for Recognition of Power Quality Disturbances," in *IEEE Access*, vol. 8, pp. 229184-229200, 2020.

http://doi.org/10.36893/IEJ.2023.V52I3.1364-1369

9. Kaushik, R. K. "Pragati. Analysis and Case Study of Power Transmission and Distribution." J Adv Res Power Electro Power Sys 7.2 (2020): 1-3.

10. Akash Rawat, Rajkumar Kaushik and Arpita Tiwari, "An Overview Of MIMO OFDM System For Wireless Communication", *International Journal of Technical Research & Science*, vol. VI, no. X, pp. 1-4, October 2021.

11. R. Kaushik, O. P. Mahela and P. K. Bhatt, "Hybrid Algorithm for Detection of Events and Power Quality Disturbances Associated with Distribution Network in the Presence of Wind Energy," *2021 International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)*, Greater Noida, India, 2021, pp. 415-420.

12. Sharma, R., Kaushik, M. and Kumar, G. (2015) "Reliability analysis of an embedded system with multiple vacations and standby", International Journal of Reliability and Applications, Vol. 16, No. 1, pp. 35-53.

13. Kaushik, M. and Kumar, G. (2015) "Markovian Reliability Analysis for Software using Error Generation and Imperfect Debugging" , International Multi Conference of Engineers and Computer Scientists 2015, vol. 1, pp. 507-510.

14. P. K. Bhatt and R. Kaushik, "Analysis and Optimum Energy Management of Renewable Integrated Rural Distribution Network", *2022 Second International Conference on Artificial Intelligence and Smart Energy (ICAIS)*, pp. 1583-1588, 2022.

15. R. Kaushik, O. P. Mahela and P. K. Bhatt, "Power Quality Estimation and Event Detection in a Distribution System in the Presence of Renewable Energy" in Artificial Intelligence-Based Energy Management Systems for Smart Microgrids, Publisher CRC Press, pp. 323-342, 2022, ISBN 9781003290346.

16. R. K. Kaushik Anjali and D. Sharma, "Analyzing the Effect of Partial Shading on Performance of Grid Connected Solar PV System", *2018 3rd International Conference and Workshops on Recent Advances and Innovations in Engineering (ICRAIE)*, pp. 1-4, 2018.

17. R. Kaushik, O. P. Mahela, P. K. Bhatt, B. Khan, S. Padmanaban and F. Blaabjerg, "A Hybrid Algorithm for Recognition of Power Quality Disturbances," in *IEEE Access*, vol. 8, pp. 229184-229200, 2020.

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