A STUDY ON CHALLENGES FACED IN HYBRID RECOMMENDATION SYSTEM



A Seminar Report

Submitted to the APJ Abdul Kalam Technological University
in partial fulfillment of requirements for the award of the

degree of

Master of Computer Application

by

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CERTIFICATE

This is to certify that the report entitled **A STUDY ON CHALLENGES FACED IN HYBRID RECOMMENDATION SYSTEM** submitted by **BHANUMATI MOHAN** (SJC20MCA-2021), student of Fourth Semester to the Department of MCA, St Joseph's College of Engineering & Technology, Palai, in partial fulfillment of the requirements for the degree of Master of Computer Applications from APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, Thiruvananthapuram, is an authentic report of the seminar presented by her.

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HoD-Incharge Dept. of MCA SJCET, Palai Dr. Rahul Shajan (Seminar Coordinator) Assistant Professor Dept. of MCA SJCET, Palai Mrs. Liz George (Seminar Guide) Assistant Professor Dept. of MCA SJCET, Palai **DECLARATION**

I BHANUMATI MOHAN hereby declare that the seminar report A STUDY ON

CHALLENGES FACED IN HYBRID RECOMMENDATION SYSTEM,

submitted for partial fulfillment of the requirements for the award of degree of Master

of Computer Application of the APJ Abdul Kalam Technological University, Kerala

is a bonafide work done by me under supervision of Mrs. Liz George, Assistant

Professor, Department of MCA.

This submission represents my ideas in my own words and where ideas or words

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I also declare that I have adhered to ethics of academic honesty and integrity

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ABSTRACT

User preferences are represented via recommender systems, which are used to offer goods to buy or examine. It is a kind of Web intelligence techniques to make a daily information filtering for people. They are software tools used to generate and provide suggestions for items and other entities to the users by exploiting various strategies. They've evolved into important applications in electronic commerce and information access, allowing users to be steered to the objects that best fit their wants and preferences by delivering suggestions that efficiently prune enormous information spaces. For performing recommendations, a range of strategies have been offered, including contentbased, collaborative, knowledge-based, and other techniques. These strategies have been integrated in hybrid recommenders to increase performance. Hybrid recommender systems combine two or more recommendation algorithms in a variety of ways to maximize synergistic benefits.

This paper gives the landscape of comparative study on challenges faced in Hybrid recommender system based on different strategies implemented in the last decade. Approaches such as Clustering, Auto encoders, Artificial Neural Networks (ANN), Ensemble Based, Internet of Things (IoT) and Deep Learning. We address the most relevant challenges faced in hybrid recommendation technique. Further, we show that semantic ratings obtained from various approaches that enhance the effectiveness of hybrid recommender systems.

Keywords: user preferences, information filtering, hybrid recommender system, challenges, strategies.