RECOMMENDER SYSTEMS, THEIR APPROACHES AND CHALLENGES: A LITERATURE REVIEW

Boralessa G.W.Y.S[1], Shafana M.S[2], Roshan G. Ragel[3], Ahamed Sabani M.J[4]

[1,2,4]Department of Information and Communication Technology, South Eastern University of Sri Lanka
[3]Department of Computer Engineering, Faculty of Engineering, University of Peradeniya, Peradeniya.

geethyapa@gmail.com

Abstract

Over the last few years, Recommender Systems (RS) have shown massive growth and become increasingly essential as web service giants like "youtube" and "Netflix" skyrocketed in terms of popularity., RS can be defined as algorithms that attempt to suggest relevant products to consumers. Collaborative filtering, content-based, and hybrid recommendation methods are the primary recommendation methods that will be discussed in this work. This paper also covers the basics and potential ways to increase the relevance and competence of RS and the limitations and constraints of current recommendation approaches, including the cold-start problem, stability vs plasticity problem, sparsity issues, etc. This study provides a comprehensive overview of current state-of-the-art Recommender System methods utilised in several application areas. A systematic review was conducted using highly referenced literature discovered on Google Scholar, then filtered down to the most current and relevant studies in the RS field. This study aims to provide researchers and industrial developers with a concise guide to recommender systems through a systematic analysis.

Keywords: *Recommendation Approaches, Recommender Systems, hybrid recommenders, Review, Survey*