Abstract

Recommendation have become extremely common in recent years, and are utilized in a variety of fields, some popular areas include movies, music, news, books, research articles, search queries, social tags, and products in general. They were initially based on demographic, content-based and collaborative filtering. In this project, we are increasing the efficiency rate of recommendation, queried by the user. This is achieved by using an adaptive bandit technique
for recommendation-based on exploration-exploitation strategies and classifier technique in multi-armed bandit algorithm. We provide an empirical analysis on medium-size datasets, showing increased prediction performance (as measured by click-through rate). We aim to create recommendation system to predicate with high level of accuracy. We will tackle the cold start problem affecting the system with low amount of user data history.

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Index Terms

Computer Science Information System

Keywords

Recommender System Knowledge-based System Explore-exploitation Artificial Intelligence