عنوان مقاله:

Hybrid Adaptive Educational Hypermedia Recommender Accommodating User's Learning Style and Web Page Features

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خلاصه مقاله:

Personalized recommenders have proved to be of use as a solution to reduce the information overload problem. Especially in Adaptive Hypermedia System, a recommender is the main module that delivers suitable learning objects to learners. Recommenders suffer from the cold-start and the sparsity problems. Furthermore, obtaining learner's preferences is cumbersome. Most studies have only focused on similarity between the interest profile of a user and those of others. However, it can lead to the gray-sheep problem, in which users with consistently different opinions from the group do not benefit from this approach. On this basis, matching the learner's learning style with the web page features and mining specific attributes is more desirable. The primary contribution of this research is to introduce a feature-based recommender system that delivers educational web pages according to the user s individual learning style. We propose an Educational Resource recommender system which interacts with the users based on their learning style and cognitive traits. The learning style determination is based on Felder-Silverman theory. Furthermore, we incorporate all explicit/implicit data features of a page and the elements contained in them that have an influence on the quality of recommendation and help the system make more effective recommendations.

کلمات کلیدی:

Adaptive Educational Hypermedia, Individual Learning Styles Detection, Learner Modeling, Page Ranking, Recommendation Systems.