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Personalized News Recommendation Based on Social Media User Profiling and Click Behavior

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Abstract

World Wide Web is become one of the most commonly used to sharing any kind of information. From that the online News reading is become popular. Now a days, many newspaper agencies are presenting their news in web portals. Generally, many online news publishing companies publish their news and sort news according to the time and show it to the end user. From that case many users find difficulties when find correct articles according to their preferences. To overcome from this issue most of online news companies are provide search facility to search any item that user want. The user must manually enter their preference and select articles that user want this approach is not impress all readers because due to the time and effort user putting search the item. In the previous work there are some recommendation systems but there are not very accurate. In that works ether user must put their interest or the system will only be looking in to the click counts of articles. Another drawback of the current solution is not considered about the redundant information. Sometimes users read same information twice from that people west their valuable time.

To overcome from above mention limitations of online news environment, introduced The Personalized News Recommendation Based on Social Media User Profiling and Click Behavior system. In this system it automatically collects information about the user and make their profiles with their preference. By that preference system make the recommendation from hybrid recommendation engine that can achieve a high accuracy in the recommendation. Also, this system has a novelty detection method to recognized similar types of news articles.

All the main recommendation engine is implemented in python. In this engine there are two recommendation methods, collaborative filtering method and content-based filtering method. Combination of these two methods is the hybrid engine that I use to recommend news articles. This implemented system is test under deferent conditions. The evaluation is done by many domains. Eventually, the test results attested that the design, analysis, implementation and documentation have been carried out in an effective and in an efficient manner.

Key Words:

Personalized; News Recommendation; hybrid recommendation; novelty detection.