Google Click-Behavior Analysis based News Recommender

Personalized News Recommendation Based on Click Behavior

Abstract: Online news reading has become very popular as the web provides access to news articles from millions of sources around the world. A key challenge of news service website is help users to find news articles that are interesting to read. In this paper, we present our research on developing personalized news recommendation system in Google News. The recommendation system builds profiles of user’s news interests based on user’s click behavior on the website. To understand the news interest change over time, we first conducted a large-scale log analysis of the click behavior of Google News users. Based on the log analysis, we developed a Bayesian framework for predict user’s current news interests, which considers both the activities of that particular user and the news trend demonstrated in activities of a group of users. We combine the information filtering mechanism using learned user profile with an existing collaborative filtering mechanism to generate personalized news recommendation. The combined method was deployed in Google News. Experiments on the live traffic of Google News website demonstrated that the combined method improves the quality of news recommendation and attracts more frequent visit to the website.

<http://static.googleusercontent.com/media/research.google.com/en//pubs/archive/35599.pdf>