IBM NALAIYA THIRAN

NEWS TRACKER APPLICATION

TEAM ID: PNT2022TMID31583

DOMAIN: CLOUD APPLICATION DEVELOPMENT

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LITERATURE SURVEY:

I. Detection and Tracking for Online News Texts

Source: IEEE Xplore

Authors: GUIXIAN XU 1 , YUETING MENG1 , ZHAN CHEN1 , XIAOYU QIU2 , CHANGZHI WANG3 , AND HAISHEN YAO.

Websites:https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=8703401

About the Paper:

The topic tracking research is conducted based on topic model. Firstly, the LDA model is used to extract the topic information from the news texts of different time windows. Then the improved Single-Pass algorithm is used for topic tracking, in which the time decay function and the JS divergence are used to measure the similarity between the topics. Finally, for the results of topic tracking, the content and strength of the topics are analyzed. In the experimental part, the topic discovery experiment is first carried out on the tagged corpus. the K-means method is compared to highlight the advantages of using LDA for topic discovery. Second, the improved single-pass algorithm is used to track news topics.

II. Exploring Mobile News Reading Interactions for News App Personalisation

Source: ResearchGate

Authors: Marios Constantinides, John Dowell, David Johnson, Sylvain Malacria.

Websites: https://www.researchgate.net/publication/299870645

About the Paper:

As news is increasingly accessed on smartphones and tablets, the need for personalising news app interactions is apparent. We report a series of three studies addressing key issues in the development of adaptive news app interfaces. We first surveyed users' news reading preferences and behaviors; analysis revealed three primary types of reader. We then implemented and deployed an Android news app that logs users' interactions with the app. We used the logs to train a classifier and showed that it is able to reliably recognise a user according to their reader type. Finally, we evaluated alternative, adaptive user interfaces for each reader type. The evaluation demonstrates the differential benefit of the adaptation for different users of the news app and the feasibility of adaptive interfaces for news apps.

III. Topic Detection and Tracking in News Articles

Source: Research India Publications

Authors: Sagar Patel, Sanket Suthar ,Sandip Patel

Websites:https://www.researchgate.net/publication/315657099_Topic_Detection_and_Tracking_in_News_Articles

About the Paper:

As world's technology is rapidly growing, we have to applying system for sports domain, if time permits would check our approach on politics, entertainment, science and discovery, etc. We have used Agglomerative hierarchical clustering using average distance measure for topic detection and K-nearest neighbour classifier for topic Tracking. We select K -Nearest Neighbor classifier for tracking because it gives better performance. As well as it makes the fewest assumptions of about terms, stories and efficient decisions surface for the tracking task. For future work we will detect and track broadcast news.

IV. Research on Topic Detection and Tracking for Online News Texts

Source: IEEE Xplore

Authors: Guixian Xu, Yueting Meng, Zhan Chen, Xiaoyu Qiu, Changzhi Wang, HaishenYao.

Websites: https://ieeexplore.ieee.org/document/8703401

About the Paper:

The rapid development of the Internet, the amount of data has grown exponentially. On the one hand, the accumulation of big data provides the basic support for artificial intelligence. On the other hand, in the face of such huge data information, how to extract the knowledge of interest from it has become a matter of general concern. Topic tracking can help people to explore the process of topic development from the huge and complex network texts information. By effectively organizing large-scale news documents, a method for the evolution of news topics over time is proposed in this paper to realize the tracking and evolution of topics in the news text set. First, the LDA (latent Dirichlet allocation) model is used to extract topics from news texts and the Gibbs Sampling method is used to speculate parameters. The topic mining using the K-means method is compared to highlight the advantages of using LDA for topic discovery. Second, the improved single-pass algorithm is used to track news topics. The JS (Jensen-Shannon) divergence is used to measure the topic similarity, and the time decay function is introduced to improve the similarity between topics with the similar time. Finally, the strength of the news topic and the content change of the topic in different time windows are analyzed. The experiments show that the proposed method can effectively detect and track the topic and clearly reflect the trend of topic evolution.

V. Exploring mobile news reading interactions for news app personalisation

Source: Research India Publications

Authors: MariosConstantinides,John Dowell,David Johnson,Sylvain Malacria

Websites: https://dl.acm.org/doi/10.1145/2785830.2785860

About the paper:

Classified each user as a particular news reader type corresponding with the five factors and making the simplifying assumption that the factors are equally weighted. So, each item in the training set was of the following form: user id, F1, F2, F3, F4, F5, Class (where Fn: Factor, Class: news reader type) and explored the feasibility of recognising patterns of news reading interactions and evaluated three adaptive interface designs for different news reader types. Incomplete adaptive mobile news framework providing automatic personalisation of news apps.