

# **IBM NALAIYA THIRAN**

## **NEWS TRACKER APPLICATION**

**TEAM ID: PNT2022TMID40290**

**DOMAIN: CLOUD APPLICATION DEVELOPMENT**

### **TEAM MEMBERS:**

1. SRINIVASAN U
2. SANJAI B
3. KABILAN T
4. ASHOKUMAR
5. VIGNESH K

### **LITERATURE SURVEY:**

#### **I. An Approach to News Event Detection and Tracking Based on Stream of Online News**

**Source:** IEEE Xplore

**Authors:** Yajie Qi, Li Zhou, Huayou Si, Jian Wan, Ting Jin.

---

#### **About the Paper:**

Once an event occurs, usually there are a large number of online news to be released. How to quickly and accurately detect the hot events from the huge amount of online news is the focus and hotspot. Event detection and tracking technology is as a key technology to solve this problem. In this paper, we propose an approach to detect hot events from the online news stream in a timely manner and track the hot events. Based on the idea of single-pass clustering algorithm, this approach addresses the weight of keywords and proposes a new method to calculate similarity among news to track event. Through the analysis of the experimental results, we can find that this algorithm has a good effect on hot event detection.

## **II. Exploring Mobile News Reading Interactions for News App Personalisation**

**Source:** ResearchGate

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

---

### **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. Android News App**

**Source:** Research India Publications

**Authors:** Brijesh Joshi, Nehal Patel.

---

### **About the Paper:**

As world's technology is rapidly growing, we have fast connection and network to instantly connect to other person. Day to day use in mobile, tablets and laptop is increasing, most of the people already have this facilities. In this fast and information oriented world we need to stay updated with every incidents and news too. This News app is android mobile application where user have access to latest news from 120+ newspapers from 50+ countries. The main focus of this application is to connect news articles from all around the world and deliver it to user as fast as possible in best visualize way.

## 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, Haishen Yao.

---

### **About the Paper:**

With 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.