# IBM NALAIYA THIRAN NEWS TRACKER APPLICATION

**TEAM ID:** PNT2022TMID25308

**DOMAIN:** CLOUD APPLICATION DEVELOPMENT

**BATCH:** B3-3M5E

#### **TEAM MEMBERS:**

1. VIJIAYALAKSHMI S

- 2. SHARMILA P
- 3. JENITA GRACELIN J
- 4. MAHALAKSHMI J

#### 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.

Websites: https://ieeexplore.ieee.org/document/8048142

### **About the Paper:**

Whenever an event occurs, there are typically a lot of web news stories that need to be published. The emphasis and attention is on how to rapidly and effectively identify the hot events from the massive amount of web content. A crucial piece of technology to address this issue is event detection and tracking technologies. In this study, we suggest a method for quickly identifying and following hot events in the internet news stream. This strategy, which is based on the concept of a single-pass clustering algorithm, tackles the weight of keywords and suggests a fresh way to determine how news stories are related to monitor events. We may conclude from the examination of the experimental data that our algorithm effectively detects hot events.

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

**Source:** ResearchGate

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

**Websites:** <a href="https://www.researchgate.net/publication/299870645\_Exploring\_mobile\_news\_reading\_interactions\_for\_news\_app\_personalisation">https://www.researchgate.net/publication/299870645\_Exploring\_mobile\_news\_reading\_interactions\_for\_news\_app\_personalisation</a>

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

The necessity for customising news app interactions is clear as more people consume news on smartphones and tablets. We provide findings from three experiments that focus on crucial challenges in the design of adaptive news app interfaces. We started by asking people about their reading habits and interests, and our analysis identified three main categories of readers. After that, we developed and released an Android news app that keeps track of user interactions. We demonstrated that a classifier we trained using the logs can accurately identify a user based on the type of reader they are. Finally, we assessed various adaptive user interfaces for every type of reader. The review shows how different users of the news app will benefit from the modification differently, as well as how adaptable interfaces are possible.

## III. Android News App

**Source:** Research India Publications

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

Websites: https://www.ripublication.com/ijaer18/ijaerv13n11\_78.pdf

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

We now have quick connections and networks that allow us to connect to other people right away as technology is developing so quickly. Most people currently have access to daily use devices like mobile phones, tablets, and laptops. We must keep up with all happenings and news in our quick and information-driven environment. Users of this Android news app can access the most recent news from 120+ newspapers in 50+ countries. This application's major goal is to connect news stories from all around the world and give them to users as quickly as possible in the finest visual format.

## 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: <a href="https://ieeexplore.ieee.org/document/8703401">https://ieeexplore.ieee.org/document/8703401</a>

#### **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 singlepass 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.