

Triple Security Generator in Smart Authentication Using Data Mining Techniques

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Abstract— The primary objective of this paper is to authenticate and work with playlists by using Triple Security Generator (TSG). It is used to evaluate with best suitable data mining functions, to explore and express features and grouping of music. Here we have three methods to authenticate playlists. The recommender systems are popular social web tools, as they address the information overload problem and provide personalization of results. Our intent is to select optimal features, to identify and develop the best suitable Data Mining functionality that could be applied to class of problem. The TSG technique can provide best secure of the list. This playlist authentication generation technique provides security among music files and user interested music file with flexible manner.

Index Terms— TSG, Authentication, Flexibility, Data analysis and mining.

I. INTRODUCTION

The collaborative recommendation techniques can greatly improve performance over baseline methods in situations where content features are unavailable. There is a great potential over World Wide Web (WWW) for downloading files in secured manner. New innovative methods are practiced to attract more attention from online or from normal users, however to facing challenges.

➤ **Web mining** - is the application of data mining techniques to discover patterns from the Web. According to analysis targets, web mining can be divided into three different types, which are **Web usage mining**, **Web content mining** and **Web structure mining**.

➤ **Web usage mining** is the process of extracting useful information from server logs i.e. user's history.

➤ **Web structure mining** is the process of using graph theory to analyze the node and connection structure of a web site.

➤ **Web content mining** is used to mining, extraction and integration of useful data, information and knowledge from Web page contents.

The actual data mining task is the automatic or semi-automatic analysis of large quantities of data to extract

previously unknown interesting patterns [10] such as groups of data records (cluster analysis), unusual records (anomaly detection) and dependencies (association rule mining). This usually involves using database techniques such as spatial indexes [8]. These patterns can then be seen as a kind of summary of the input data, and used in further analysis or for example in machine learning and predictive analytics. A lot of work still remains to be done in adapting known mining techniques. Specifically, the following issues must be addressed:

1. **New Types of Knowledge:** Web usage mining studies reported to date have mined for *association rules*, *temporal sequences*, *clusters*, and *path expressions*. As the manner in which the Web is used continues to expand, there is a continual need to figure out new kinds of knowledge about user behavior that needs to be mined for.

2. **Improved Mining Algorithms:** The quality of a mining algorithm can be measured both in terms of how *effective* it is in mining for knowledge and how *efficient* it is in computational terms. There will always be a need to improve the performance of mining algorithms along both these dimensions.

3. **Incremental Web mining:** Usage data collection on the Web is incremental in nature. Hence, there is a need to develop mining algorithms [2] that take as input the existing data and mined knowledge, and the new data, and develop a new model in an efficient manner.

4. **Distributed Web mining:** Usage data collection on the Web is distributed by its very nature. If all the data were to be integrated [3] before mining, a lot of valuable information could be extracted. However, an approach of collecting data from all possible server logs is both non-scalable and impractical. Hence, an approach which knowledge mined from various logs can be integrated together into a more comprehensive model is required.

II. PROPOSED WORK

This process can basically involve web content based mining. A content mining [2] based approach to derive playlist from better authentication can use TSG technique.

The TSG technique (**figure**) can be determined as follows:

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1. The **walking style** of a person depends upon the sound and it is measured by frequency they walk. By this way it allows next authentication scheme.

2. Second stage of authentication by **choosing animals sounds** it can be authenticated. If wrong selection of animals sound cannot be allowed to access.

3. Third stage of authentication by using different types of songs already stored in database can be checked and also make the user to **vibration the song** and allow accessing the playlists.

Our data also contains some hand-made playlists created by experts. Since the playlist information [1] is explicitly given, we can directly transform the min to sessions for later use. From the playlists, we derive two further datasets:

1. **Playlist (sequential):** The sequential occurrence within the playlist, as initially ordered by the expert.

2. **Playlist (combinatorial):** The set-based interpretation of the playlists.

For comparison with the later presented algorithms, we use the following most popular (MP) baseline methods for next song prediction:

1. Most often downloaded/purchased songs, most often played songs.
2. Most popular by user.

Our most popular by user baseline predicts those tracks to the user that he has listened to most. The baseline methods are only trained on the play log, do not consider sequence information available in the log file and always output a constant prediction.

Some examples of features in a music file are:

- Artist
- Genre
- Duration
- Frequency

- Tempo
- Electric Guitar Fraction etc.

APPROACHES TO SYSTEMS

1. Content Based
2. Collaborative
3. Context Based
4. Hybrid(Content Based + Collaborative)

1) Visual data mining

A study found that Visual Data Mining is faster and much more intuitive than traditional data mining.

2) Music data mining

Data mining techniques and in particular co-occurrence analysis [2] has been used to discover relevant similarities among music corpora (radio list, CD databases) for the purpose of classifying music into genres in an objective manner.

- Two plausible data mining methods in the context of combating terrorism include "pattern mining" and "subject-based data mining".

- Privacy is considered lost when information concerning [5] an individual is obtained, used, or disseminated, especially if this occurs without their knowledge or consent. The obtained data will be analyzed, and clustered to form profiles; the data will be made anonymous before clustering so that there are no personal profiles.

III. CONCLUSION

In this work we have presented our technique **TSG** to recommend songs to the user to allow to next level of performing methods. We showed that simple collaborative information greatly improves performance compared to baseline methods. This TSG technique is used for high authentication for the playlists. However, while the approach shows that learning and using such similarity measures can help, they also implicitly show that current content-based solutions have lots of space for further improvements.

IV. FUTURE WORK

The future implementation for our approach is:

1. It can access for large database.
2. This TSG technique provides better authentication for all type of security needed resources.

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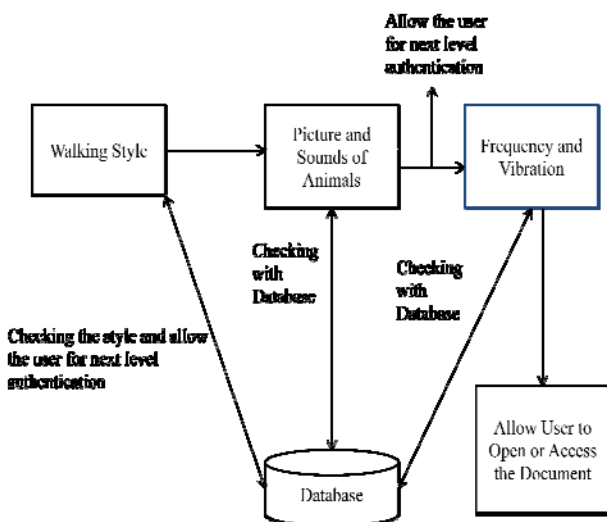


Figure 1: Proposed work Architecture

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