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Detect Online Spread of Terrorism Using Data Mining

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Abstract: Terrorism has grown its roots quite deep in certain parts of the world. With increasing terrorist activities, it has become important to curb terrorism and stop its spread before a certain time. So as identified internet is a major source of spreading terrorism through speeches and videos. Terrorist organizations use internet to brain wash individuals and promote terrorist activities through provocative web pages that inspire helpless people to join terrorist organizations. So here we propose an efficient web data mining system to detect such web properties and flag them automatically for human review.

Keywords: Anti-Terrorism, Data Mining, Online, Terrorism, World

I. Introduction

Terrorist organizations are using the internet to spread their propaganda and radicalize youth online and encourage them to commit terrorist activities[1]. To reduce the online foot print of such harmful websites we need to create a system which detects specific keywords in that particular website and if those keywords are found then that website should be blacklisted. Data mining as well as web mining are used together at times for efficient system development [1]. Web mining also consists of text mining methodologies that allow us to scan and extract useful content from unstructured data. Text mining allows us to detect patterns, keywords and relevant information in unstructured texts

II. Problem Statement

Our system will detect patterns, keywords and relevant information in unstructured texts in web page using web mining as well as data mining [2]. Our system will mine webpage using web mining algorithm to mine textual information on web pages and detect those web pages that are relevant to terrorism. Data mining as well as web mining is used together at times for efficient result.

III. Existing Solutions

Traditionally, there was no such system to keep an eye on various websites or any suspicious words present online[4]. Cops were unable to track the terrorist related website or any person with suspicious

information. The ratio of terrorism is high in today's world. There must be a system to track those suspicious word online and bring down the ratio of terrorism.

USER LOCIN INSERT/SAVE SPECIFY URL USER LOCIN URL SCAN URL SCAN RESULTS OF POTENTIAL TERROR RELATED URLS URLS RESULTS TERROR RELATED URLS

Model of proposed system fig 1.1

4.1 Hardware and Software Requirements

The Project is loaded in Visual Studio 2010. We used Visual Studio for Design and coding of project. Created and maintained all databases into SQL Server 2008, in that we create tables, write query for store data or record of project.

4.1.1 Hardware Requirement:

i3 Processor Based Computer or higher Memory: 1 GB RAM

Hard Drive: 50 GB Monitor Internet Connection

4.1.2 Software Requirement: Windows 7 or higher Visual studio 2010. SQL Server 2008.

V. Modules and their Descriptions

The system comprises of 5 modules as follows:

- Login: Here, the admin or the authorized person need to enter the login credentials.
- Add KeywordsAfter successful login, admin can add various keyword which specifies terrorism.
- Check WebsiteHere, admin can add multiple URL's to scan the website for any suspicious word.
- View/Check all WebsitesAll the URL's which are entered by the admin are listed here. Can check the suspicious keyword.
- Update PasswordSystem allows admin or the authorized person to update their password.

VI. Methodology

We use web mining algorithms to mine textual information on web pages and detect their relevancy to terrorism.[3] Websites created in different platform can be tracked using this application. This system will check web pages whether a webpage is promoting terrorism. This system will classify the web pages into various categories and sort them appropriately. There are two features used in this system that is data mining and web mining. Data mining is a technique used to mine out patterns of useful data from large data sets and make the most use of obtained results[4]. Web mining also consists of text mining methodologies that allow us to scan and extract useful content from unstructured data. This System are used only by the government officials who work for country security. System will help the cops to easily track the susceptible community who are held in terrorism.

Website will have following characteristics:

- Load Balancing:Since the system will be available only the admin logs in the amount of load on server will be limited to time period of admin access.
- Easy Accessibility: Records can be easily accessed and store and other information respectively.
- User Friendly:The Website will be giving a very user-friendly approach for all user.
- Efficient and reliable: Maintaining the all secured and database on the server which will be accessible according the user requirement without any maintenance cost will be a very efficient as compared to storing all the customer data on the spreadsheet or in physically in the record books.
- Easy maintenance: Web Data Mining for Terrorism Analysis website is design as easy way. So maintenance is also easy.

VII. Applications

- We use web mining algorithms to mine textual information on web pages and detect their relevancy to terrorism
- Websites created in different platform can be tracked using this application. This system will check web pages whether a webpage is promoting terrorism.
- This system will classify the web pages into various categories and sort them appropriately. There are two features used in this system that is data mining and web mining.
- Data mining is a technique used to mine out patterns of useful data from large data sets and make the
 most use of obtained results.
- Web mining also consists of text mining methodologies that allow us to scan and extract useful content from unstructured data. Data mining as well as web mining are used together at times for efficient system development[4].
- System will track web pages that are more susceptible to terrorism and will report IP Address to the user who is using the system.
- This System are used only by the government officials who work for country security. System will help the cops to easily track the susceptible community who are held in terrorism.

VIII. Conclusion

To curb the menace of terrorism and to destroy the online presence of dangerous terrorist organizations like ISIS and other radicalization websites. We need a proper system to detect and terminate websites which are spreading harmful content used to radicalizing youth and helpless people.

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