Terror Tracker System:
A Web Portal for Terrorism Research

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1. INTRODUCTION

Terrorism research has fast become one of the more important fields in research of late. Researchers need to be able to quickly make connections from vast storehouses of publicly available resources. The problem of information overload rapidly becomes one of the central challenges to existing information retrieval systems. Commercial search engines are far too generally scoped to be of much assistance to terrorism researchers. We believe that a narrowly focused vertical search engine coupled with several novel information-organization features will dramatically change the current terrorism research landscape. We introduce the Terror Tracker System (TTS) as our answer to addressing many of the current overload problems.

2. TERROR TRACKER SYSTEM FEATURES

We will demonstrate our TTS prototype, both as an overall searching platform, as well as its individual time-saving components. TTS has the following features; Vertical searching, Meta-searching, Result categorization, Text summarization, and Network Visualization.

We scoped TTS to focus on collections of publicly available information from reputable sources. Our collection encompasses approximately 55,000 news articles on specific individual terrorists and terrorist organizations. Our collection building search terms were built using the identified terrorists and organizations from the book on Terrorism Networks by terrorism expert, Marc Sageman [1].

Besides using the basic internal searching features, TTS also meta-searches several international news-related websites, such as BBC (UK), Guardian Weekly (UK), Arab News (Middle East), Al-Ahram Weekly (Middle East), PBS (US), Crikey (Australia), and the Daily Times (Pakistan), to obtain a global perspective on current terrorism information.

Researchers can categorize their search results into convenient result folders. Documents are analyzed using the Arizona Noun Phraser [2], and scanned for similar content before placed into specific document categories. This time-saving tool can dramatically reduce search time for researchers that wish to focus their efforts into precise areas and cut down on part of the information overload problem.

Another time-saving tool in TTS is the Text Summarization tool. This tool can condense entire documents into several lines of summarized text. It works by identifying the most relevant and characteristic sentences in a document by its positioning and repetition. This tool helps researchers dramatically save time by pointing out the key findings in the document.

Researchers are also able to visualize their search results through the Network Visualization component. This exciting component scans user-selected search documents for semantic relations and organizes them in a social network structure. Researchers are then able to quickly see the types of relationships that exist between various terrorists and organizations without having to manually scan each document. This tool can show how certain people posses a relationship (e.g., Bin Laden met with King Fahd), or show other noun-verb relationships such as places visited etc.

3. ACKNOWLEDGMENTS

4. REFERENCES

[1] Sageman, M. *Understanding Terror Networks*. University of Pennsylvania Press, Philadelphia, PA, 2004.

[2] Tolle, K.M. and Chen, H. Comparing Noun Phrasing Techniques for Use with Medical Digital Library Tools. *JASIS*, *51* (4). 352-370.