Radical Web Text Classification Using a Composite-Based Approach

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Abstract : The widespread of terrorism and extremism activities on the internet has become a major threat to the government and national securities due to their potential dangers which have necessitated the need for intelligence gathering via web and real-time monitoring of potential websites for extremist activities. However, the manual classification for such contents is practically difficult or time-consuming. In response to this challenge, an automated classification system called composite technique was developed. This is a computational framework that explores the combination of both semantics and syntactic features of textual contents of a web. We implemented the framework on a set of extremist webpages dataset that has been subjected to the manual classification process. Therein, we developed a classification model on the data using J48 decision algorithm, this is to generate a measure of how well each page can be classified into their appropriate classes. The classification result obtained from our method when compared with other states of arts, indicated a 96% success rate in classifying overall webpages when matched against the manual classification.

Keywords : extremist, web pages, classification, semantics, posit

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