



# Cloud Computing Intelligent Data-Driven Model: Connecting the Dots to Combat Global Terrorism

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*Abstract-Internet emerging as one of the de-facto means of communication, there are huge amount of the data shared over internet. In now days there are virtual communities or (social religious groups) are formed on different social networks. These virtual communities are to recruit peoples for the violent extremist activities. There are components like white power music and white supremacist games are used to influence youth for the terrorist activities and radical movements. In this paper a survey over the different techniques which are used to detect and forecast the violent extremist movement and provide a prediction model for such activities. Techniques SVM and LDA are used for the purpose of the violent extremist forecasting purpose.*

**Keywords:- SVM (support vector machine), Voilent Extremist, White power music, LDA(Latent Dirichlet allocation).**

**INTRODUCTION** - The trendy landscape of political theory has enlarged to embrace the web and on-line social media. In specific, violent extremist (VE) organizations have increasingly used these technologies to recruit new members. Within this text, a VE cluster is a company that uses violent suggests that to disrupt a longtime authority. Insurgents and terrorists are common forms of VE teams that act with the specific goal of influencing vox populi or inciting political amendment. A radical non secular cluster organizing inflammatory nevertheless peaceful protests or a politically actuated person engaging in direct action aren't thought-about violent extremists beneath our definition. several trendy teams Baptists have radical non secular views, but these beliefs are neither necessary nor decent to

classify them as violent extremists while not the intent to hold out or advocate for specific acts of violence. Inside this text, VE accomplishment is any try by a VE member to radicalize or persuade another person to assist his or her VE movement. VE cyber-recruitment is thus VE accomplishment activity that makes use of computers and therefore the web. Recent analysis by shows that cyber tools are most prestigious at the onset of a future member's extremist activity—the accomplishment and radicalization part. Extremist teams use the free and open nature of the web to form on-line communities and circularize literature and training materials while not having to admit ancient media outlets, which could censor or amendment their messages. Extremist organizations interact in directed communication and promotion, recruiting members on social websites like Second Life, Facebook, and radicalized non secular internet forums. Counter-VE organizations would profit from associate automatic methodology of statement accomplishment activity within these on-line communities (e.g., range of accomplishment posts per day during a discussion forum). Such a technique would assist analysts in their rummage around for such content and provide valuable info for with efficiency allocating scarce human resources to counter the anticipated level of accomplishment activity.

We hypothecate that authors of VE cyber-recruitment content don't behave every which way, however instead target forums and time periods within which the web communities seem to be at risk of accomplishment information. For instance, a community can be at risk of VE accomplishment if it



is presently expressing discontentedness with the established authority. We tend to any hypothecate that the linguistics content (i.e., linguistic meaning) of messages is that the key to expressing such vulnerabilities, as against different linguistic levels such as morphology (word structure) and syntax (sentence structure). Our hypothesized links between community message content and accomplishment activity result in the following analysis question: however ought to the linguistics content of a web community's digitized text be incorporated into forecasting models of VE cyber-recruitment? We take up our analysis question within the following sections that are organized as follows. In Section II, we compare off-line violent extremist accomplishment with recent cyber recruitment efforts. To boot, we tend to discuss previous counterinsurgency efforts and up to date analysis that outlines the challenges related to analyzing VE activities such as accomplishment.

## **LITERATURE REVIEW**

In [1] a forecasting technique which used to forecast the activity of violent extremist recruitment in forum is presented. In that technique a SVM based model used to detect recruitment post in the forum. A LDA (latent dirichlet allocation) is used to analyze content of the post in the forum. Put that in to different time series model to forecast that recruitment process. That technique provides less no of forecasting error as compare to the other existing technique. In this paper an ARIMA (Auto regressive integrated moving average), PCR (Principal component regression) is used in the existing technique but there is a problem in generation of the prediction of the recruitment.

In this paper an ARIMA and ETS (Exponential smoothing) is used to provide the better forecasting results. Comparison with other technique shows that this technique provides better results as compare to the other technique.

In [2] a SVM (Support Vector Machine) based classification technique is presented which used to identify the post related to the violent extremist recruitment. To analyze that process a dark web portals data is used which contains data of more than 28 social websites. That data poses the content related to violent extremist activity and that data also contains religious (Islamic) discussion. In that an analysis process on the basis of the different factors likes the time frame, data sources and some other factors.

SVM classification technique is used to classify that data which helps to identify the violent extremist recruitment activity. In previous technique a naïve based classification technique is used to classify that data which is not efficient to provide better results.

In [3] perspective over the virtual communities supporting terrorist and violent extremist activities is presented. These virtual communities play a vital role in such extremist recruitment processes. Virtual communities or group over social networks poses components like white power music and white supremacist games which used to promote the racism against the non-whites are used to conduct activities to recruit peoples for violent extremist activities. There are many other means by which radical perception is created, which used to influence the peoples for the terrorist activities.

In [4] a study over the language used in the Jihadists magazines and other forums, and their influence and impact over the society is presented. This paper focuses three aspects one is how high level descriptors are used in the language to influence the peoples, second computational methodology to validate effectiveness of the language, third how these jihadist magazines are going to influence the society. In this a language model is used to analyze the high level property of the document and provide the data or words in a corpus. Process to analyze that data like occurrence of such influential words and treated as parameter to judge any document.[5], focuses on the problem of radicalization of the youth in the western countries. In that most of the youth are second generation muslim born in western countries thus they notrequired any vesa to travel this country. In that case more and more people born in countries like USA, UK, and Canada are going involve in many terrorist activities. By conduct many counter terrorism activities in these countries generate insecurity in the youth of muslim community and that create a perception of negligence and by the speeches of the



some influential leaders and radical organizations they fall to such activities.

In [6] a human centered and target centric model is presented that provides an efficient way for the crime investigations. In this costumer generates a request to get information about any target. For further process Investigator request for the information of the target to the collectors. Then the information related to the target is provided by the collectors but that information in the form of multiple pieces then investigator arranges that data pieces and create a model for the investigation. Then information related to the target extracted from that. In that way a crime investigation process is conducted.

### **CONCLUSION**

In this paper a survey over the different technique which uses to predict violent extremism in social media is presented. There are techniques like SVM classification and LDA (Latent Dirichlet Allocation ) is used to present a model to predict violent extremism in the social media content. Dark web portal data which contains data about the racial content over the internet or any activity that create any violent movement and or terrorist activity.

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