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Fake News Detection Using Blockchain

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Abstract: Due to fast growth in the data day by day it's a very difficult task to find out original information from the content. Social media helps us a lot to get information and deliver us on time. As people are more habituated towards social media and find the news from different resources sometimes the fake news also impacts people a lot in their day-to-day life. Blockchain technology helps people to get the proper information in various sectors like as food sector, fashion world, supply chain, as well as banking sectors. The broadcast and transparent nature of blockchain can help in the above sector enhance the technology as well as helps to detect the fact news in the current situation. In this paper, we gave a complete idea about the blockchain technology methods and techniques used widely in fake news detection. We can acquire this technique by combining and modifying the blockchain technique by applying the Text Mining (TM) algorithm. The above research paper talks about a brief research method on blockchain technology, It's an outcome of testing data that clearly defines and represents the importance of the blockchain method in the implementation technique. Here the main goal of the paper is to find a security system ledger.

Keywords: Component; fake news detection; text mining;blockchain; detection algorithms words;

I. INTRODUCTION

"Nowadays due to spread of false rumors or news that might cause insecurity among common general people and system which people are following or security, Providing incorrect information tends to carry a sentence of imprisonment for some years." Fighting information crimes" Involvement of some common people in this illegal activities may arise and affect public order, may cause a problem for them and also they may punish over a period of more and more years, and it can also put them in problem for them a period to come out from the situation. These are the issues that challenge the researcher to get out the resultant solution to the outcome and to provide proper information to the common people to avoid the crime and as well as to be aware of the proper information. When digital content is shared, with the media and video or pictures of any event, it's very difficult to find out the authenticity and credibility of that particular news. It will mislead the people and forced them to involve in criminal activities. Due to insufficient information, people can't have faith in the news detection system. Day by day due to the fast growth of the digital world making digital content and writing the report makes us very easy. Fake news creates wrong thoughts among the people and in their minds too, to make it resolve we need to find the originality of the content and represent it to the people.

Whereas, putting an end to doing wrong things will affect people a lot concerning their career.

There are several processes to implement a special approach to handle the process of fake news by applying the algorithms and different techniques. We need to approach different rules and regulations needs to adjust the functional and behavioral approach of the model to enhance the trust among people.

In the above research problem, one major challenge is to upgrade the decentralization of social networks by minimizing the spread of fake news and to verify the fake news detection properly.

After doing a general competitive study in this paper describe

1) It gives complete analysis and detection of the fake news on social networks.
2) Verify the source integrity of information and find out the reality of the following content.
3) Identify the rank from the content and analyze it as per the node's importance.

II. RELATED WORKS

There are different techniques of blockchain technology that can be used in past research methods and implementations as categorized into four types as Knowledge-based detection system, Style-based detection, Propagation based detection, and Credibility based detection. Knowledge-based detection identifies and explains about knowledge and fact-checking mechanisms and describes the real facts properly, whereas style-based detection is a completely different description theory compared to others it gives an idea regarding the intention of the news article and the understanding level of the content and to explains it properly.

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Apart from that propagation-based deception helps to explore the contents of propagation of the article and credibility-based detection refers to using the article source to determine its authenticity. Blockchain technology is used to trace the source regarding the fake news and then determine its accuracy to find out the fake news and identify the false contents before reaching to the general people. It helps us to identify the fake news and identify the resources spreading the false news. As per the survey of Wenqian Shang et. al. (2018), many systems can be used to detect the past for fake news and trace and detect false information using blockchain. Proposes a blockchain-based system can be useful for finding source evaluation and itmakes sure that the news article has not been exposed toothers. Also, there are different methods such as the multi- model approach, and different algorithms are used to find out the fake news from different social media and internet resources. The current research work is based on the following work of the implementation techniques and methods to identifythe problem statement and detection of fake news.

III. BLOCKCHAIN TECHNOLOGY

Blockchain technology gathers information from different resources in such a process no one can change or modify the content. Blockchain is a hyper ledger technology that has different qualities such as it is distributed, immutable, and each and every transaction is recorded and it has the most secure system. All the authors have a complete copy of the ledger for clear transparency and ideas. For each transaction, each and every block are added together like a chain system, and the network is valid by using transaction cryptography. Each transaction happened in termsof blocks and it is the most secure system. This process is a very secure and centralized system also no one can hake the information from the system. It is a very secure ledger and also very helpful for the author to secure the data and to avoid transmitting fake news.

A. Distributed vs Centralized Architecture

Centralized software systems [7], give a clear description of thecomponents are located around like a distributed system approach. In another way, the components of distributed systems approach to form a network system of connected components that don't support any central element of coordination or control system shown in the figure described neatly in the below figure.

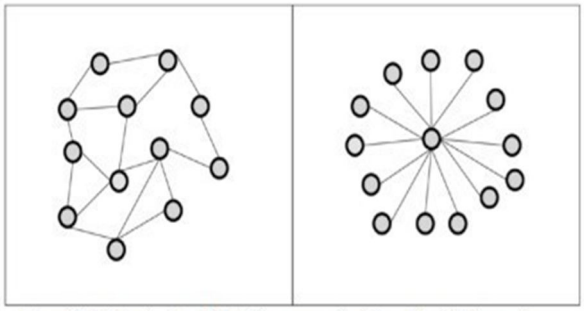


Fig -2: Distributed (left) vs. centralized (right) system architecture

Figure 2 describes distributed and centralized architectures are given in above. The circles in the figure represent nodes, which interconnected each other. The edges represent connections between one node to another in the above figure. The righthand side of Figure 2 describes all nodes are interconnected to a centralized node, whereas another figure clearly describes all the nodes connected in a decentralized architecture. It isessential to check that none of the components is directly connected with all other components. System architecture describes all the nodes that are directly or indirectly somehow connected. The right-hand side of the Figure describes the centralized architecture, where all the nodes are connected to a central system. The components are not connected directly. They only have one direct connection to the central component. Information passing from one node to another will differ from a distributed architecture to centralized architecture.

The distributed and centralized architectures both represent different nodes of the systems and each and every node connected among each other to pass the information from one node to the other node. The advantage of the distributed system is if in case any of the networks got disconnected also there maybe a chance of passing the information from one node to the other node. But in the case of centralized architecture if any one of the connections will be lost it tends to disconnect of all the nodes. These are the two types of architectures that can be used to represent the data and pass the information throughout the process. Mostly in the distributed architecture used here.

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IV. PROPOSED METHODOLOGY

The method can identify the secure process of the transaction and defines the data as highly secure in this system. The blockchain technology talks about the most secure system of the network security system which is used in different areas such as news, media, advertisement,

The proposed methodology talks about the different algorithms to analyze the system and to find out the fake news from different resources. , our goal is to find out the Researcher's point of view and the concept analyzed by the researcher. There are different processes to identify fake news detection, followed by the previous research work. There are various media and online technologies where nowadays fake news is spreading very fastly. The research methodology is based on proper news agencies as a source toverify other news reality and the truthness and how to implement the BFS algorithm to analyze the important nodes After the various research papers review we got a conclusion that blockchain technology helps to identify the fake news before it reaches to the common people. The research technology builds. There are different algorithms to find out the fake news from the content such as the Turing machine algorithm is the most appropriate algorithm to select andfilter the fake content. The process identifies the important nodes from the content and asks for the truth or false of the content. The Research paper talks about different methods to identify the nodes and to detect fake news from the content. As fewer numbers of applications are analyzed to detect the fake news content below are a few steps described to identifyto detect the errors from the blockchain technology.

In this technique, it gathers all the information in a decentralized way and helps to identify the correct decision node from the process. After finding the correct decision node it will analyze which node is true and which node is a false node based on that it will create the content.

1) Here the author and the people combine together to find their thoughts from different resources and create blocks to form a chain system.
2) Here the nodes can't give access to ownerships within a particular chain system.
3) The process contains a high ledger process so that it's very difficult to break the privacy of that system and it is impossible to break the chain system.
4) The process contains BFS algorithms to distinguish thenodes and identify the important nodes among all and which clearly define the importance of each and every node.
5) Day by day due to the growth of unstructured data it's very difficult to manage the data of huge volume of data and find the fake data among the unstructured data.
6) Lack of space to save the data and providing this chain system for all social networks will be very difficult for the service provider and also it is a verycomplex procedure to handle a large amount of data to gather at a time to find the reliability of the given data.

To overcome this kind of situation we are analyzing here the BFS algorithm and TM algorithm to get reliableinformation for the particular news detection data is necessary for most forms of transactions. Hence, if an immutable ledger of data existed, we need to remove this type of dependency data from one source to others respectively. A Blockchain-based news consortium aims to do just that by using a decentralized network. With no central authority, it is exceedingly hard to alter the data inside a ledger. An agency The research work is based on acquiring the trust and the faith of social and common people and people from the industries too. It helps to identify the different problems of how the fake news is spreading over the common people and by using different implementation techniques to avoid this problem immediately. Acquiring the trust among the people and the different industries giving genuine information is highly essential. This technology helps us lot get the accurate information.

A. Detection Method

Blockchain technology is a decentralized system that helps to find out the different nodes and relations among them. It distinguishes each and every node starting from the master node. Master nodes can be reliable nodes such as social media, google, Facebook, and Twitter, etc. Master nodes are the nodes based on the result of good or bad. Each and every node starts from the master node and is followed by the sub-nodes. Each and every node contains the master nodes which is a highly secure process and we can not change the nodes without permissions. Here the data security and privacy are very high and very difficult to threaten the data. Here the data are collected together and will do indexing as per the indexingdata's are arranged together. As it's very little chance of theft ofdata from the hyper ledger. Our proposed method defines to identify the blocks from the content and the important nodes will be filtered from the context. It will help to minimize the redundancy of the text. Due to this, we can reduce the redundantcontent of the text. The main research method of the text to avoid fake news and to deliver important content to the commonpeople.

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V. CONCLUSION

To avoid fake rumors in different social media here we are describing the concept of blockchain technology to avoidthese kinds of fake rumors and the main goal of the process isto Deliver correct information to the user. Here we are using different technologies and algorithms to solve these techniques and mainly the BFS algorithm to find the important content from the text and analyze its importance then it will create the content.

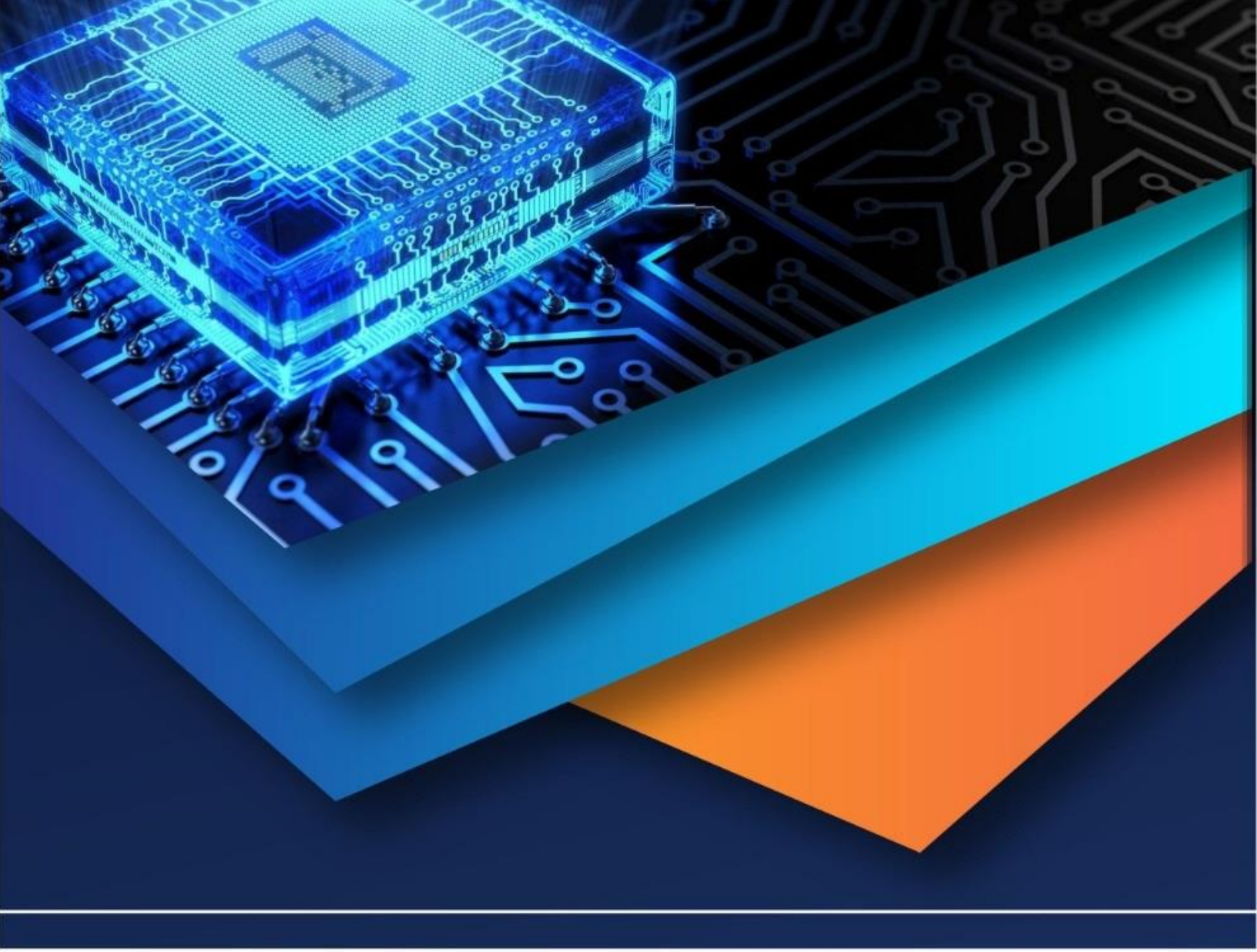
It can also detect redundant content which can be tested fromvarious resources or from the existing news. The basic purpose of this method is to enhance the content and identify the fault content from the text and deliver the original content from the text. This method proposed a test methodology to identify the false news from the content and test the truth or false with respect to various test cases.

The method started with identifying different algorithms and different search techniques to find out the fake news. Herewe are proposing various techniques to come out from the previous techniques and by adopting new techniques to enhance the research method.

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