**1 INTRODUCTION**

ONLINE social networks, such as Twitter, have grown highly popular in the 21st century, as the numbers of users who are using them on daily basis attest. Information dissemination through these platforms is their most attractive feature, as it is known to be speedy and cost effective. The fact that users are allowed to express themselves with little to no control is also another very attractive aspect of these platforms [1]. As users are afforded the freedom to publish content with no supervision, the problem of information credibility on social networks has also risen in recent years. Crafty users of these platforms can spread in-formation maliciously for reasons that may not be compatible with the good of society. Users are becoming wary that rumors that are spread through online social networks can have detrimental effects. Research on information credibility is thus the best solution to the problem of how to assess the credibility of information and perhaps mitigate the dissemination of misinformation [2]. Currently, researchers have employed various methodologies in studies on information credibility [2], [3]. Some of them consider the problem to be one of classification that should be solved in an automated fashion using machine learning or graph-based algorithms [3], [5], [6]. Others view it as a cognitive problem requiring human-centric verification [7], [8]. Some authors have looked at how various aspects of social media, such as the effect of the name value and user connectedness, influence users’ judgments concerning credibility, [8], [9]. Other researchers have ventured to devise algorithms for assessing credibility, while others have studied the visualization of credibility scores using such means as radar graphs and comparisons between systems such as Fluo and TopicNets [10]. Some researchers have gone so far as to create systems to assess credibility automatically in real time. Such systems include TweetCred [11] and Twitter-Trails [12]. There has also been an enormous amount of research focused on this topic in cases of high-impact events [13], such as earthquakes, floods, and political movements. The main challenge in assessing the credibility of information dissemination on online social networks is the nature of the networks; they are very complex and grow in users

and content every day. Among the many challenges related to studying credibility on social networks and the web are the following:

1. The complexity of social networks and the web creates difficulty in identifying resources for use in studying and assessing credibility.

2. OSNs by their very nature evolve dynamically over time and become very large in size, with various structures that make it difficult to obtain the information needed to discern the credibility of users.

3. The credibility of a user is influenced continuously by various factors, such as changes in the social topography, other users’ behavior, preferences, and context. 4. Malicious activities can evade existing spam filters through various means. For example, in Twitter, malicious users can purchase followers or use tools to automatically generate fake ac-counts and post tweets with the same meaning but different words.

5. The process of evaluating solutions has also been a problem in terms of resources, given that most researchers are limited in terms of the extent to which they can test their.