Trust Evaluation Framework For Social Area Network

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Abstract: This paper focuses on trust evaluation framework for social area network. It is not well understood how privacy concern and trust influence social interactions within social networking sites. An online survey of popular social networking sites and applications like Facebook, MySpace and Whatsapp compared perceptions of trust and privacy concern, along with willingness to share information and develop relationships. Facebook, as one of the social networking services, has been facing widespread criticism on how its newsfeed algorithm is designed, thus amplifying dissemination of misinformation. This paper presents how to detect the fake data or the shared data is in safe hands or not, to verify the Facebook account is of a valid user or not, to determine the Facebook news is fake or real or as well as evaluating or maintaining the trust on social network or analyze whether the data sent or received by the authenticated user or not.

IndexTerms: Trust, Privacy, Social Networking Sites, Social Search, Web Search, Information Sharing, Misinformation, Fake News

1. INTRODUCTION
Social networking sites are a type of virtual community that has grown tremendously in popularity over the past few years. When people join social networking sites, they begin by creating a profile, then make connections to existing friends as well as those they meet through the site. A profile is a list of identifying information. It can include your real name, or a pseudonym. It also can include photographs, birthday, hometown, religion, ethnicity, and personal interest. Members connecting others by sending a “friend” message, which must be accepted by the other party in order to establish a link. “Friending” another member gives them access to your profile, adds them to your social network, and vice versa. Social network sites (SNSs) such as Friendster, CyWorld, and MySpace allow individuals to present themselves, articulate their social networks, and establish or maintain connections with others. Members use the sites for a number of purposes. The root motivation is communication and maintaining relationships. Popular activities include updating others on activities and whereabouts, sharing photos and archiving events, getting updates on activities by friends, displaying a large social network, presenting an idealized persona, sending messages privately, and posting public testimonials. This paper describes a study of the impact of trust and internet privacy concern on the use of social networking sites for social interaction. It begins with a summary of relevant research related to social networking sites. The online survey described and the results presented, followed by limitations and conclusions.

2. How we evaluate trust of people on social network:

2.1 Facebook LogIn Page by Image Scanning Approach:

By adding this feature to Facebook, it gives a huge security to the Facebook. Whenever user wants to create a Facebook account, it must be mandatory that user have to upload their face image. So that one user have only one account on Facebook. Whenever the same user wants to create their fake Facebook account, the Facebook server will not give them any kind of authority to create the fake Facebook account or the Facebook server will easily detect that this is not a valid user or it’s a fake identity creator. This is how we prevent the creation of Facebook fake accounts by image scanning approach.
2.2 Facebook News Authentication By Right Click Authenticate approach:
There must be a button, icon or option below every news that is authenticate icon, the authenticate option will provide news authentication. On clicking authenticate option by facebook user it gives a option like it’s a fake news, it’s a spam or whether its annoying news. This is how facebook users will easily authenticate the huge number of daily uploaded news on facebook whether this news is real or fake.

3. LITERATURE REVIEW

An online survey of two popular social networking sites, Facebook and MySpace, compared perceptions of trust and privacy concern, along with willingness to share information and develop new relationships [1]. Members of both sites reported similar levels of privacy concern. Facebook members expressed significantly greater trust in both Facebook and its members, and were more willing to share identifying information. Even so, MySpace members reported significantly more experience using the site to meet new people. These results suggest that in online interaction, trust is not as necessary in the building of new relationships as it is in face to face encounters. They also show that in an online site, the existence of trust and the willingness to share information do not
automatically translate into new social interaction. This study demonstrates online relationships can develop in sites where perceived trust and privacy safeguards are weak.

Trust is an underdeveloped concept in sociology, promising theoretical formulations are available in the recent work of Luhmann and Barber. This sociological concept complements the psychological and attitudinal conceptualizations of experimental and survey researchers[2]. Trust is seen to include both emotional and cognitive dimensions and to function as a deep assumption underwriting social order. Contemporary examples such as lying, family exchange, monetary attitudes, and litigation illustrate the centrality of trust as a sociological reality.

The phenomenon of using social network status messages to ask questions. We conducted a survey of 624 people, asking them to share the questions they have asked and answered of their online social networks.[3] We present detailed data on the frequency of this type of question asking, the types of questions asked, and respondents” motivations for asking their social networks rather than using more traditional search tools like Web search engines. We report on the perceived speed and quality of the answers received, as well as what motivates people to respond to questions seen in their friends” status messages. We then discuss the implications of our findings for the design of next-generation search tools.

Computing and applying trust in web-based social networks. The computational problem of trust is to determine how much one person in the network should trust another person to whom they are not connected. Author presents two sets of algorithms for calculating these trust inferences: one for networks with binary trust ratings, and one for continuous ratings. For each rating scheme, the algorithms are built upon the defined notions of trust.[4] Each is then analyzed theoretically and with respect to simulated and actual trust networks to determine how accurately they calculate the opinions of people in the system. Author shows that in both rating schemes the algorithms presented can be expected to be quite accurate.

The role of trust in knowledge sharing. The purpose of this research is to focus on the role of trust in knowledge sharing. Social capital researchers have put forward trust as an important force behind the sharing of knowledge[5]. This study aims to investigate whether trust indeed explains knowledge sharing relationships, or whether there are in fact much more important drivers of the sharing of knowledge in new product development projects.

Trust computations and trust dynamics in mobile ad hoc network. Trust is an important aspect of mobile ad hoc networks (MANETs). It enables entities to cope with uncertainty and uncontrollability caused by the free will of others. Trust computations and management are highly challenging issues in MANETs due to computational complexity constraints, and the independent movement of component nodes. This prevents the direct application of techniques suited for other networks[6]. In MANETs, an untrustworthy node can wreak considerable damage and adversely affect the quality and reliability of data. Therefore, analyzing the trust level of a node has a positive influence on the confidence with which an entity conducts transactions with that node. In this work we present a detailed survey on various trust computing approaches that are geared towards MANETs. We highlight the summary and comparisons of these approaches. In addition, we analyze various works on trust dynamics including trust propagation, prediction and aggregation algorithms, the influence of network dynamics on trust dynamics and the impact of trust on security services.

Trust in large organizations. Trust should be a particularly important for the performance of large organizations.[7]

Social networks and health. People are interconnected, and so their health is interconnected. In recognition of this social fact, there has been growing conceptual and empirical attention over the past decade to the impact of social networks on health.[8] This article reviews prominent findings from this literature. After drawing a distinction between social network studies and social support studies, we explore current research on dyadic and supradyadic network influences on health, highlighting findings from both egocentric and sociocentric analyses. We then discuss the policy implications of this body of work, as well as future research directions. We conclude
that the existence of social networks means that people’s health is interdependent and that health and health care can transcend the individual in ways that patients, doctors, policy makers, and researchers should care about.

The relationship between trust and interest similarity in online social network. A remarkable growth in quantity and popularity of online social networks has been observed in recent years. There is a good number of online social networks exists which have over 100 million registered users. Many of these popular social networks offer automated recommendations to their users.[9] This automated recommendations are normally generated using collaborative filtering systems based on the past ratings or opinions of the similar users. Alternatively, trust among the users in the network also can be used to find the neighbors while making recommendations. To obtain the optimum result, there must be a positive correlation exists between trust and interest similarity. Though the positive relations between trust and interest similarity are assumed and adopted by many researchers; no survey work on real life people’s opinion to support this hypothesis is found. In this paper, we have reviewed the state-of-the-art research work on trust in online social networks and have presented the result of the survey on the relationship between trust and interest similarity. Our result supports the assumed hypothesis of positive relationship between the trust and interest similarity of the users.

CONCLUSIONS

This paper discusses the social networking sites are quite popular, and are beginning to attract the attention of academic researchers. Most of the studies conducted to date have focused on a single social networking site. Few studies have compared attitudes and behavior between two sites. The results of this comparison study were able to show interesting similarities and differences between the two sites. Subjects from Facebook and MySpace expressed similar levels of concern regarding internet privacy. Facebook members were more trusting of the site and its members, and more willing to include identifying information in their profile. Yet MySpace members were more active in the development of new relationships. These results show that the interaction of trust and privacy concern in social networking sites is not yet understood to a sufficient degree to allow accurate modeling of behavior and activity. The results of the study encourage further research in the effort to understand the development of relationships in the online social environment and the reasons for differences in behavior on different sites.

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