

Evaluation of Trustworthiness for Online Social Networks Using Advanced Machine Learning

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The trustworthiness of online users has become a current issue in the field of social computing with the rapid popularity of online social networks. The evaluation of trust in social networks has been widely used in situations such as friend – recommendation, e- commerce and access control systems. For sharing and exchanging of information between the trusted users only trustworthiness of the user needs to be determined. One of the key requirements in trust applications is recognizing the trustworthy actors in the network. In the proposed research, a general trust framework will be introduced to calculate the node trust values for social network users by applying machine learning methods. Some selected features of social network are used as the training feature and the measurement whether there is edge between nodes used as label information. Secondly, a training model will be used to calculate the node trust value. Then a recommendation algorithm will be used to calculate node trust score. Finally, the simulation is used to verify the performance of suggested method. For the simulation of experimentation, data from an adaptive social network will be used. The emergence of online social networking (OSN), like Facebook, Twitter, Instagram are allowed people to build and maintain social relationship over the internet. Currently, a large number of users around the globe are connected to the online social networks for sharing and exchanging information. Online social networking is a common platform for communication and sharing different type of information. The popularity has increased of such social networks that have millions of connected users. In online social network, it is important to determine which user gets access to the information related to the user. Information related to trustworthiness of other users can help a user to take decisions about information exchange, sorting and filtering of information. The method will help in building more confidence about using social network among users. Protection of information from untrusted user is crucial aspect in social network. The method enables maintenance of the user privacy and confidentiality by finding trustworthiness of user.

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