A social trust path recommendation system in contextual online social networks.


Summary: Online Social Network (OSN) is becoming increasingly popular and being used as the means for a variety of activities, where trust is one of the most important factors for participants decision making. This demands the evaluation of the trustworthiness between two unknown participants along a certain social path between them in OSNs. This paper presents a social trust path recommendation system which allows a user to find the optimal social trust path between two participants in OSN with the state-of-the-art path selection method. In addition, users could specify their preferences of social contexts including social relationships and social trust between participants and social positions of participants in path selection. This recommendation system provides three types of social trust paths to evaluate the trustworthiness of the unknown participants effectively. i.e., the shortest path, the path with the maximal trust values (denoted as Max T) and the optimal social trust path, which can be used in many applications like to help an employee find potential trustworthy employees or to help a retailer to find trustworthy loyal customers.

Keywords: OSN; trust; social trust path recommendation
doi:10.1007/978-3-319-11116-2_63