Privacy-Preserving Model for Social Network Sites to Prevent Unwanted Information Diffusion

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Abstract : Social Network Sites (SNSs) can be served as an invaluable platform to transfer the information across a large number of individuals. A substantial component of communicating and managing information is to identify which individual will influence others in propagating information and also whether dissemination of information in the absence of social signals about that information will be occurred or not. Classifying the final audience of social data is difficult as controlling the social contexts which transfers among individuals are not completely possible. Hence, undesirable information diffusion to an unauthorized individual on SNSs can threaten individuals' privacy. This paper highlights the information diffusion in SNSs and moreover it emphasizes the most significant privacy issues to individuals of SNSs. The goal of this paper is to propose a privacy-preserving model that has urgent regards with individuals' data in order to control availability of data and improve privacy by providing access to the data for an appropriate third parties without compromising the advantages of information sharing through SNSs.

Keywords: anonymization algorithm, classification algorithm, information diffusion, privacy, social network sites

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