Privacy Policy Recommendation for Heterogeneous Content Sharing Sites

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Abstract : *Pictures are currently one of the key empowering agents of client's availability, over social Networks. So sharing happens outside the client's gatherings for motivations behind distinguish new associates and their advantage this may uncover client's touchy data to the questions. Most substance sharing sites permit clients to enter their protection inclinations. Late studies have demonstrated that clients battle to set up and keep up such protection settings. Along these lines, numerous have recognized the need of arrangement proposal frameworks which can help clients to effortlessly and appropriately design protection settings. Most substance sharing sites permit clients to enter their security inclinations. Sadly, late studies have demonstrated that clients battle to set up and keep up such protection settings. One of the fundamental reasons gave is that given the measure of shared data this procedure can be monotonous and mistake inclined. Along these lines, numerous have recognized the need of approach suggestion frameworks which can help clients to effectively and appropriately arrange security settings. Notwithstanding, existing recommendations for computerizing security settings seem, by all accounts, to be deficient to address the interesting protection needs of pictures because of the measure of data certainly conveyed inside of pictures, and their association with the online environment wherein they are uncovered. In this paper, we propose an Adaptive Privacy Policy Prediction (A3P) framework which plans to give clients a bother free protection settings experience via consequently producing customized approaches.*

KEYWORDS: Adaptive Privacy Policy Prediction (A3P), privacy preferences, Heterogenetic Adaptive Privacy Policy Prediction (HA3P), Monitor User behaviors

1. INTRODUCTION

Data & Knowledge Engineering(DKE) is a journal in database systems and knowledge base systemsA knowledge engineer integrates knowledge into computer systems in order to solve complex problems normally requiring a high level of human expertise.Previously proposed an Adaptive Privacy Policy Prediction(A3P) system which provides users with privacy settings experience by automatically generating personalized policies.This policy omits the unwanted information displaying to the user in the social websites and filtering those information which would be interested by the user.The A3P-core classifies the image and determines whether there is a need to invoke the A3P-social.It groups users into social communities with similar social context and privacy preferences and continuously monitors the social groups.It predicts policies for the users directly based on their historical behavior

Heterogenetic Adaptive Privacy Policy Prediction (HA3P) system which generates content sharing policies automatically for privacy setting based on user behavior.Contents are classified based on the meta information and similar policy is fetched and recommended to newly uploaded images After user approval the policy is set to the uploaded multimedia content.We monitor the users behavior and create user groups with similar social context.The policy is updates whenever there is change in user behaviors

Social media's become one of the most important part of our daily life as it enables us to communicate with a lot of people. Creation of social networking sites such as MySpace, LinkedIn, and Facebook[1], individuals are given opportunities to meet new people and friends in their own and also in the other diverse communities across the world. This improved technology leads to privacy violation where the users are sharing the large volumes of images across more number of peoples. This privacy need to be taken care in order to improve the user satisfaction level. The goal of this survey is to provide a comprehensive review of various privacy policy approaches to improve the security of information shared in the social media sites

We consider the problem of discovering association rules between items in a large database of sales transactions[2]. We present two new algorithms for solving this problem that are fundamentally di erent from the known algorithms. Empirical evaluation shows that these algorithms outperform the known algorithms by factors ranging from three for small problems to more than an order of magnitude for large problems. We also show how the best features of the two proposed algorithms can be combined into a hybrid algorithm, called AprioriHybrid.. AprioriHybrid also has excellent scale-up properties with respect to the transaction size and the number of items in the database

As sharing personal media online becomes easier and widely spread, new privacy concerns emerge [3]– especially when the persistent nature of the media and associated context reveals details about the physical and social context in which the media items were created. In a first-of-its-kind study, we use context-aware camerephone devices to examine privacy decisions in mobile and online photo sharing. Through data analysis on a corpus of privacy decisions and associated context data from a real-world system, we identify relationships between location of photo capture and photo privacy settings. Our data analysis leads to further questions which we investigate through a set of interviews with 15 users.

Environment monitoring is the main operation for the sensor nodes. Sensor networks are building with a group of sensor nodes. Sensor networks are constructed with energy and storage constraints. Data collection points are referred as sink nodes. Location and time factors are considered in the data query schemes[4].Distributed database management schemes are building to manage sensor network data collection tasks. Sensor network is a huge volume of data observing environment. All the user queries are processed by the sensor databases. Centralized and distributed database approaches are adapted in the wireless sensor network environment. Data query operations are performed in the distributed data transmission model. Data transmission load is reduced using data compression and prediction methods. Optimizer is used to analyze the user query values.

User shares images through social sites, to maintain privacy has become a major problem, by a recent wave of publicized incidents where inadvertently user shares personal information. In focus of these incidents, there is need of tool to help control of users access to their shared content is apparent[5]. To address this need, we propose a system which is an Adaptive Privacy Policy Prediction (A3P) system to help user's images to compose privacy settings. We observe the role of image content, social context, and metadata as possible indicators of user's privacy preferences. According to user available history on the site,we propose a two level framework which determines the best available privacy policy for the user's images being uploaded

Multiple hypothesis testing is a significant problem in nearly all neuroimaging studies [6]. In order to correct for this phenomena, we require a reliable estimate of the Family-Wise Error Rate (FWER). The well known Bonferroni correction method, while simple to implement, is quite conservative, and can substantially under-power a study because it ignores dependencies between test statistics. Permutation testing, on the other hand, is an exact, non-parametric method of estimating the FWER for a given α-threshold, but for acceptably low thresholds the computational burden can be prohibitive. In this paper, we show that permutation testing in fact amounts to populating the columns of a very large matrix P

2. SYSTEM ANALYSIS

The existing system uses an Adaptive Privacy Policy Prediction(A3P) algorithm which provides users with privacy settings experience by automatically generating personalized policies. The A3P-core classifies the image and determines whether there is a need to invoke the A3P-social. It groups users into social communities with similar social context and privacy preferences and continuously monitors the social groups. It predicts policies for the users directly based on their historical behaviour. Image content analysis, for classification and interpretation add very huge work load to the process. It helps sharing only image content but today content sharing website share different multimedia contents.
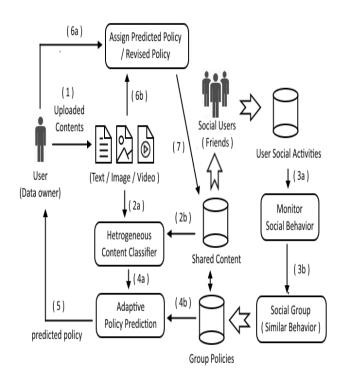
The proposed system uses Heterogenetic Adaptive Privacy Policy Prediction (HA3P) system which

generates content sharing policies automatically for privacy setting based on user behaviour. Contents are classified based on the meta information and similar policy is fetched and recommended to newly uploaded images. After user approval the policy is set to the uploaded multimedia content. We monitor the users behavior and create user groups with similar social context. The policy is updates whenever there is change in user behaviours. Unlike existing system our proposed system helps different multimedia contents like image, text and videos. Users groups are created not only based on user profile attribute but also based on user behaviour which increase the policy preferences

3.SYSTEM ARCHITECTURE

Content sharing system constructs all the required basic function for content sharing website. User profile create and user session management and basic access control mechanisms. Content sharing and viewing functionalities for registered users. It provide the basic interface and platform for implementing our concepts.Media content classification compares the existing share content of the user with the uploaded media content and finds the similar group of those media item. The existing media extracted based on classification also hold their policies which will be processed by the Policy Prediction module..Adaptive user grouping create Users groups based on their profile attributes and their social behavior. Contents are shared based on these groups associated policy Groups are dynamic they may change based on their new social behavior. This module auto detects their behavior and modifies the group accordingly

Fig - 1 Architecture Diagram

Based on the existing similar policy and current user groups the Adaptive Policy Prediction module. Find a suitable policy for the uploaded content and shows a suggestion policy to the users.

3.1 Analysis of Algorithm

Heterogenetic Adaptive Privacy Policy Prediction (HA3P) system which generates content sharing policies automatically for privacy setting based on user behavior.Contents are classified based on the meta information and similar policy is fetched and recommended to newly uploaded images.After user approval the policy is set to the uploaded multimedia content.We monitor the users behavior and create user groups with similar social context.The policy is updates whenever there is change in user behaviors

a) Unlike existing system our proposed system helps different multimedia contents like image, text and videos
b) Users groups are created not only based on user profile attribute but also based on user behaviour which increase the policy preferences
c)

4. SYSTEM IMPLEMENTATION

Microsoft's new software development platform, .NET Framework, is the first Microsoft development environment designed from the ground up for Internet development. Although .NET is not meant to be used exclusively for Internet development, its innovations were driven by the limitations of current Internet development tools and technology.

The basis of this new development platform consists of three primary components or layers: the common language runtime, the .NET Framework base classes, and the user and program interfaces, as demonstrated in Figure.The foundation of the .NET Framework is the common language runtime. Its principal purpose is to load, execute, and manage code that has been compiled to Microsoft's new intermediate byte code format called Intermediate Language (IL).

Several languages, notably Microsoft's Visual Basic .NET and C# .NET (pronounced "C sharp"), have compilers supporting this format, and many more are currently in development. It is important to note that the IL code is not interpreted. The common language runtime uses just in time compilers to compile the IL code to native binary code before execution

5. CONCLUSION

Our project reduces the social users struggle to set up and maintain their privacy settings unlike the other content sharing websites that allow users to manually enter their privacy preferences. Our result shows that we had successfully built an automated personalized privacy policy setting for not only for their uploaded images but for all other sharing documents by using a classifier on their features to assign similar privacy policies and a policy prediction for recommendation and assigning a specific privacy policy to the uploaded images.

REFERENCES

[1]   Acquisti and R. Gross, "Imagined communities: Awareness, information sharing, and privacy on the facebook," in Proc. 6th Int. Conf. Privacy Enhancing Technol. Workshop, 2006, pp. 36–58.

[2]   R. Agrawal and R. Srikant,"Fast algorithms for mining association rules in large databases," in Proc. 20th Int. Conf. Very Large Data Bases, 1994, pp. 487–499.

[3]   S. Ahern, D. Eckles, N. S. Good, S. King, M. Naaman, and R. Nair, "Over-exposed?: Privacy patterns and considerations in online and mobile photo sharing," in Proc. Conf. Human Factors Comput. Syst., 2007, pp. 357–366.

[4]   Tavakoli, A. Kansal, and S. Nath, "On-Line Sensing Task Optimization for Shared Sensors," in Proc. 9th ACM/IEEE Int'l Conf. IPSN, 2010, pp. 47-57.

[5]   Besmer and H. Lipford, "Tagged photos: Concerns, perceptions, and protections," in Proc. 27th Int. Conf. Extended Abstracts Human Factors Comput. Syst., 2009, pp. 4585–4590.

[6]   D. G. Altman and J. M. Bland ,"Multiple significance tests: Thebonferroni method," Brit. Med. J., vol. 310, no. 6973, 1995.

[7]   M. Cerullo, G. Fazio, M. Fabbri, F. Muzi, and G. Sacerdoti, "Acoustic Signal Processing to Diagnose Transiting Electric Trains," IEEE Trans. Intell. Transp. Syst., vol. 6, no. 2, pp. 238-243, June 2005.

[8]   L. Cheng and S.N. Pakzad, "Agility of Wireless Sensor Networks for Earthquake Monitoring of Bridges," in Proc. 6th INSS, June 2009, pp. 1-4.

[9]   M. Suzuki, S. Saruwatari, N. Kurata, and H.Morikawa, "A High- Density Earthquake Monitoring System Using Wireless Sensor Networks Proc. SenSys, 2007, pp. 373-374.

[10]   R. Tan, G. Xing, J. Chen, W. Song, and R. Huang, "Quality- Driven Volcanic Earthquake Detection Using Wireless Sensor Networks," in Proc. IEEE 31st RTSS, Dec. 2010, pp. 271-280.

[11]   Mainwaring, D. Culler, J. Polastre, R. Szewczyk, and J. Anderson, "Wireless Sensor Networks for Habitat Monitoring," in Proc. 1st ACM Int'l Workshop WSNA, 2002, pp. 88-97.

[12]   R. Szewczyk, A. Mainwaring, J. Polastre, J. Anderson, and D. Culler, "An Analysis of a Large Scale Habitat Monitoring Application," in Proc. 2nd Int'l Conf. Embedded Netw. SenSys, 2004, pp. 214-226.

[13]   R. Szewczyk, E. Osterweil, J. Polastre, M. Hamilton, A. Mainwaring, and D. Estrin, "HabitatMonitoringwith Sensor Networks," Common. ACM, vol. 47, no. 6, pp. 34-40, June 2004.

[14]   S. Xiang, H.B. Lim, K.-L. Tan, and Y. Zhou, "Two-Tier Multiple Query Optimization for Sensor Networks," in Proc. 27th ICDCS, 2007, p. 39.

[15] T.K. Sellis, "Multiple-Query Optimization," ACM Trans. DatabaseSyst., vol. 13, no. 1, pp. 23-52, Mar. 1988.