Data Abstraction on Content Sharing Sites using Privacy Patterns

Prof. Mamatha .E[1], Anusha.V .C[2] , Karthik R Shastry[3] , Kumuda .B[4] , Kusuma. S. S[5]

[1]*Assistant Professor, Department of ISE, Sai Vidya Institute of Technology, Bengaluru, Karnataka, India*
[2,3,4,5]*Department of ISE, Visvesvaraya Technological University/Sai Vidya Institute of Technology, Bengaluru, Karnataka, India*

***Abstract*—Image captures some real life events which is saved further as memories. It is a duplication of an incident that has occurred at an instant of time.**

The use of social media today has increased to a great extent. This may lead to unwanted disclosure of private information and privacy violations. This can result in unexpected exposure of one's social environment and lead to abuse of one's personal information. The volume of images being shared is increasing and maintaining its privacy is a major problem. Recent incidents show that users inadvertently share their personal information on social media and other sites. Taking these incidents into account, we need tools to help users control access to their shared content. Therefore, many have acknowledged the need of policy recommendation systems which can assist users to easily and properly configure privacy settings.

There are different types of data such as content, metadata, and images. Images are classified into content and metadata. The role of each social context, image content, and metadata are examined and are used as possible indicators of users privacy preferences.

We propose a two-level framework based on the users available history on the site and determines the best available privacy policy for the user's images being uploaded. Our solution relies on an image classification framework for image categories which may be associated with similar policies, also according to user's social features. Over time, the generated policies will follow the evolution of users privacy attitude.

***Keywords*— Image, Privacy, Online, Sharing, Metadata, Upload, Authentication**

I. INTRODUCTION

IMAGES are now one of the key enablers of users' connectivity. Sharing takes place both among previously established groups of known people or social circles (e. g., Google+, Flickr or Picasa), and also increasingly with people outside the users social circles, for purposes of social discovery-to help them identify new peers and learn about peers interests and social surroundings. However, semantically rich images may reveal content sensitive information. Sharing images within online content sharing sites therefore, may quickly leadto unwanted disclosure and privacy violations. Most content sharing websites allow users to enter their privacy preferences. Unfortunately, recent studies have shown that users struggle to set up and maintain such privacy settings. One of the main reasons provided is that given the amount of shared information this process can be tedious and error-prone. Therefore, many have acknowledged the need of policy recommendation systems which can assist users to easily and properly configure privacy settings.

In light of these considerations, it is important to find the balancing point between the impact of social environment and users' individual characteristics in order to predict the policies that match each individual's needs. Moreover, individuals may change their overall attitude toward privacy as time passes. In order to develop a personalized policy recommendation system, such changes on privacy opinions should be carefully considered. The role of image's content and metadata. In general, similar images often incur similar privacy preferences, especially when people appear in the images. For example, one may upload several photos of his kids and specify that only his family members are allowed to see these photos. He may upload some other photos of landscapes which he took as a hobby and for these photos, he may set privacy preference allowing anyone to view and comment the photos. Analyzing the visual content may not be sufficient to capture users' privacy preferences. Tags and other metadata are indicative of the social context of the image, including where it was taken and why, and also provide a synthetic description of images, complementing the information obtained from visual content analysis.

II. METHODOLOGY

There are six modules which are

A. Registration

The User has to be registered and authorized in order to access all the features.The user details are filled in a form which is stored in the database.

B. Authorization

The system admin is responsible for providing authorization for a specified users and can do some operations such as view uploaded images, view the searching history, view all image ranking and view all users, search images and logout.

C. Admin

Admin retrieves the user data from the database.

There admin will get list of authorized and unauthorized users.

Here admin can authorize the unauthorized user.

D. Login

After successful registration user has to login by using authorized user name and password.

Once the login is successful one can perform operations like view my details, search images and logout. The user click on my details link then the server will give response to the user with all details such as user name, phone no, address, e mail ID and location.

Before searching any images user should request a authorization to admin, then the admin will provide an authorization for particular user and send to the user.

After getting an authorization, user can search the images base on query or keyword and field like image name, image color, image usage and image type. And server will give response to the user, then that image rank will be increased.

E. Options

This module performs various functions each of which are classified as sub modules.

1. *Upload:* In this module, the user can upload n number of images by their policies If user want to upload new image then he has enter some fields like image name, image color, image description, image type, image usage, browse the image file and upload. After uploading successfully he will get a response from the server. Initially new uploaded image rank is zero. After viewing that image rank will re-rank.
2. *Request:* Generally to recommend images one end user must be a friend of other end user. So in request module, one end user can send friend request to another end user.
3. *Modify:* In this module user can modify or make changes to the content, metadata, description and image privacy with respect to the image that he uploaded.
4. *Recommend:* One end user can recommend images to another end user provided they are friends with one another. Refer fig 1.

F. Search

Uploaded images can be viewed by searching them. Refer fig 3 There are four ways of searching them they are

1. *Searching images based on Content:* Userwhile uploading any image, has to provide description and uses of that image. Images can be searched by using these contents.
2. *Searching images based on Tag*: Userwhile uploading any image, has to provide tag, of that image. Images can be searched by using the tag.
3. *Searching images based on User:*Userwhile uploading any image, can search using the user name of other end user provided both are friends.
4. *Searching images based on Metadata:*Userwhile uploading any image, has to provide color, description and uses of that image. Images can be searched by using these data.

Fig. 1.Example showing the images with various policies.

Fig. 2.Example showing an uploaded image with tag, color and description.

Fig. 3.Example showing the various search options.

III. Conclusion

We have proposed a Privacy Policy system that helps users automate the privacy policy settings for their uploaded images. This system provides a comprehensive framework to infer privacy preferences based on the information available for a given user. We also effectively tackled the issue of cold-start, leveraging social context information. In this paper, we proposed a reliable system for automatically adding photos into proper and popular groups. In addition, thesystem recommends suitable tags for photos and provides a userfriendly interface such that users could easily select their favourite tags to attach.

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