Automated Policy Prediction For Images Shared In Content Sharing Sites

Kajal Patel[1], Monali Gosavi[2], Rohini Gawale[3], Trupti Deore[4], Prof. J. Y. Kapadnis[5]

[1] *Department of Computer Engineering, P.V. G's college of Engineering, Nashik, Maharashtra, INDIA*
[2] *Department of Computer Engineering, P.V. G's college of Engineering, Nashik, Maharashtra, INDIA*
[3] *Department of Computer Engineering, P.V. G's college of Engineering, Nashik, Maharashtra, INDIA*
[4] *Department of Computer Engineering, P.V. G's college of Engineering, Nashik, Maharashtra, INDIA*
[5] *Department of Computer Engineering, P.V. G's college of Engineering, Nashik, Maharashtra, INDIA*

ABSTRACT

In this paper, we are presenting a proposed system an Adaptive Privacy Policy Prediction system to help users compose privacy settings for their images.we used two level framework which according to users available history on the site,determines best available privacy policy for users images being uploaded.our solution relies on an images classification for image categories which may be associated with similar policies and on policy prediction algorithm to automatically generate policy for each newly uploaded images,also according to users social features.over time,generated policies will follow evolution of users privacy attitude.

Keyword: *A3P,Online Information services,wed-based services,Social Image Retrival,Image Analysis,Classification,online social networks,Social Circles.*

1. INTRODUCTION

Today,Images plays very important role in social media sites (e.g. Facebook,Google+,Flickr or Picasa)provide privacy for the information and images in manually.the user can not be undersatand the privacy. In this paper,We are using Adaptive Privacy Policy Prediction (A3P) system in social media site (e.g facebook,,google+,flickr,picasa)which aims to provide users a free privacy settings by automatically generating personalized policies.

2 LITERATURE SURVEY

In A3P we examine the role of image content and metadata.We propose a two-level image classification framework to obtain image categories which may be associated with similar policies. Then, we implement a privacy policy prediction algorithm to automatically generate a policy for each newly uploaded image.

In Non-parametric kernel ranking approach for social image retrieval Social image retrieval,social image retrieval has become very challenging task in web media search.Regular approaches for social image retrieval simply adopt typical text-based image retrieval techniques to search for the relevant social images based on the associated tags, which may suffer from noisy tags. In this paper, we present a framework for social image re-ranking based on a non-parametric kernel learning technique, which explores both textual and visual contents of social images for improving the ranking performance

In Privacy-aware image classification and search, Modern content sharing environments such as Flickr or YouTube contain a large amount of private resources such as photos showing weddings, family holidays, and private parties. These resources can be of a highly sensitive nature. In order to support users in making privacy decisions in the context of image sharing and to provide them with a better overview on privacy related visual content available on the Web, we propose techniques to automatically detect private images, and to enable privacy-oriented image search.

In Personalized photograph ranking and selection system,we propose a novel personalized ranking system for amateur photographs.Two personalized ranking user interfaces are provided:one is feature-based and the other is example-based

EXISTING SYSTEM:

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.

DISADVANTAGES OF EXISTING SYSTEM:

Sharing images within online content sharing sites,therefore,may quickly leadto unwanted disclosure and privacy violations.Further, the persistent nature of online media makes it possible for other users to collect rich aggregated information about the owner of the published content and the subjects in the published content.The aggregated information can result in unexpected exposure of one's social environment and lead to abuse of one's personal information.

3. SYSTEM OVERVIEW AND ARCHITECTURE

In Facebook,as in many other social networking sites, users areresponsible for deciding what information to disclose andwhether or not to protect any of that information with privacysettings. From the time they join the community, users arechallenged to create a mental model of their online audienceand desired levels of privacy, and then determine how to bestmatch the disclosures and accessibility of their personalinformation to these mental models. Unfortunately, most sitesalso offer little explanation about the choices users have and theimpacts of their decisions, and users are forced to develop theirown strategies for achieving an appropriate balance of privacyand self-expression.

In this paper we have used the technique for generation of automated policy for the images shared in content sharing sites. Here we have sample set of images to be used to train the database. Initially user doesn't have enough data to predict the policy for the image uploaded. We have two major tasks to do to create a sample database ready.

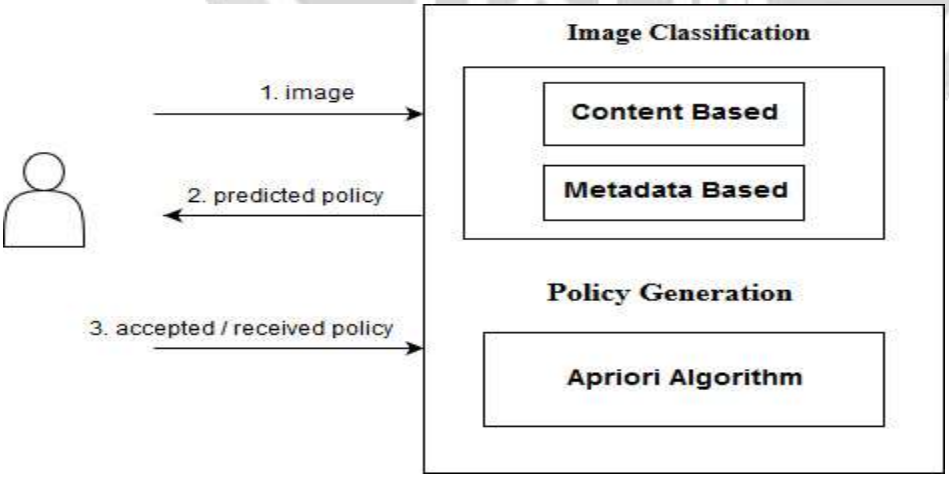


Figure.1. System Architecture

3.1 **Image Classification**

Whenever image is uploaded we had classify the image according to its content and metadata. For these we had used the wordnetclassification to generate the hypernym [1]. We had used near about 100 sample images to predict the classification. For example, consider a metadatavector t = { "cousin","first steps", "baby boy"}. We findthat "cousin" and "baby boy" have the same hypernym"kid", and "first steps" has a hypernym "initiative". Correspondingly,we obtain the hypernym list n =(kid, 2), (initiative,1)}. In this list, we select the hypernym with thehighest frequency to be the representative hypernym, e.g.,"kid". In case that there are more than one hypernyms withthe same frequency, we consider the hypernym closest tothe most relevant baseline class to be the representativehypernym. For example, if we have a hypernym listn = {(kid, 2), (cousin, 2), (initiative, 1)}, we will select "kid"to be the representative hypernym since it is closest to thebaseline class "kids". The next step is to find out the subcategory with the help of metadata. After the image get classified then we apply the mining algorithm to generate the accurate policies.

3.2 Policy Prediction

From the classified images we are going to predict the policies automated with the help of some algorithm to find frequent dataset. Here we had chosen Apriori Algorithm for association rules analysis is a technique to uncover how items are associated to each other.

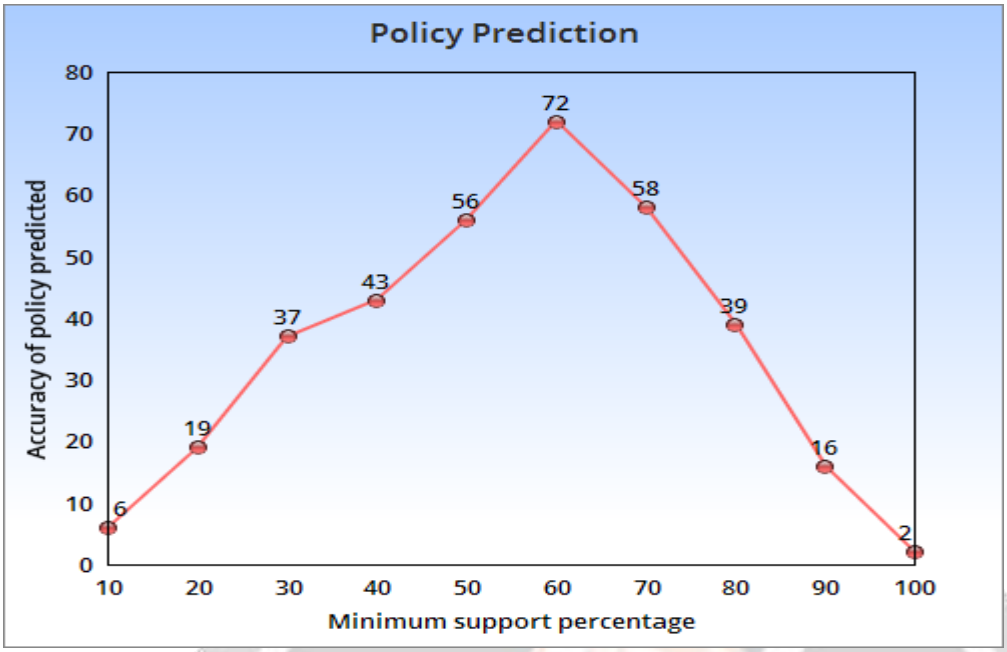
Apriori is much and more basic algorithm of Association rule mining. It was basically proposed by R. Agrawal and R Srikant[2] for mining frequent item sets. Apriori algorithm uses prior knowledge of frequent item set description that is why it is named as Apriori algorithm. Apriori makes use of an iterative approach known as breath-first search, where k-1 item set are used to search k item sets. There are two main steps in Apriori. 1) Join - candidates are generated by combining among the frequent item sets level-wise. 2) Prune- Remove items set if support is less than minimum threshold value and remove the item set if its subset is not frequent [4].

4. EXPERIMENTAL SETTINGS

We collected data sets through direct user evolution. Whenever an image uploaded then initially check has been done for existence of class to classify the image in that particular category. If such category is not present then will create a new classification with the content and metadata with the help of wordnet classification. We first train the data sets to predict the policy. For the same purpose we decided to have 30 images to be uploaded in the same category. After initializing the 30images will able to generate the policy with the help of Apriori algorithm.

5. RESULT

Training for the data sets are initially done and after that the image uploaded will generate the policies. We are getting policies with subject and their respective action with the help of Apriori Algorithm. As apriori algorithm finds the frequent data item for that it requires the minimum support value. As the minimum support values is very important to generate the accurate frequent data items. Following graph shows how accuracy is dependent on the minimum support value.



4. CONCLUSION

In this paper, we have proposed an Adaptive Privacy Policy Prediction (A3P) system that helps users automates the privacy policy settings for their uploaded images. The A3P system provides a comprehensive framework to infer privacy preferences based on information available for a given user

REFERENCES

/

[1] Wordnet - A lexical database for the English language. [Online]. Available:http://wordnet.princeton.edu
[2] Karl Aberer, (2007-2008),Data mining-A short introduction[Online],Available:http://lsirwww.epfl.ch/courses/dis/2003ws /lecturenotes/week13-Datamining print.pdf
[3] R.Divya ,S.Vinodkumar ,"Survey on AIS,Apriori and FP-Tree algorithms",In: *International Journal of Computer Science and Management Research Vol 1 Issue 2 September 2012, ISSN 2278-733X*
[4] Andrew Kusiak, Association Rules-The Apriorialgorithm[Online],Available: http://www.engineering. uiowa. edu/~comp /Public /Apriori.pdf