

The Summoner

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ABSTRACT

We stumble upon the picture when we browse through our gallery and from stack of 1000's of photos to find the images corresponding to that picture hence we have summoner. Then project aims in finding the exact or type of the features given by an image from a destined folder, drive or any other given location. The working is very simple we extract some features of input image them one by one the images are loaded from location and them further feature is also extracted, to be compared from now from stored template and from input image depending upon features Matched set by user. The images matched can be differentiated on other folder. There everything can be done off.

Then may look like a reverse image matching but everything provided is given offline which is feature not available. Various reverse image search engines such as Google images ,Tin Eye ,Sing Image match ,Yandex ,karma Decay ,Pin interest visual search tool etc. Works exactly as same but database is searched is from their as Google have largest database from all the mentioned while Bing has its own, Yandex, Tin Eye uses website to search images from.

INTRODUCTION

In this paper we are using users photos as database and searching through it kind of mining images via using features by image processing .The exact same things can also be done via various software available but there's a catch that they are available only for finding the exact duplicates but in our project we will find exact duplicate as well as similar ones and full-fledged version will be free to use and distribute as well as component other software want's commercial version to use them for extended period of time .

Finally the software is very easy to use even a novice can use it the software is efficient and error free. The programing languages used in only python.



Figure 1: Reverse Image Search via

II.EXISTING SYSTEM

2.1. Google Images

Google images is a widely used website to search images. Introduced 15 years ago, Google images have the largest database than most of the other sites. In June 2011, Google Images introduced the feature of reverse image search. The mechanism of reverse photo search here is via uploading an image from your computer or pasting the link of the image in the search bar itself, it works equally well both ways, or you can simply drag and drop the image in search bar. Google images use algorithms based on various attributes like shape, size, color and resolution to get the similar pictures.

Google images is completely free to use, there is no limit on file size or file type, and it certainly has the largest number of images indexed so, the possibility of finding a match is extremely high.

2.2 TinEye

TinEye is a product of Idee Inc., a Toronto based company. It has been the most popular and widely used reverse search engine till date with 13.9 billion images indexed. TinEye, as per their claims is the first website ever to use the image identification technology. To use this service, you have to upload the desired image or provide its link and command the tool to hunt for similar pictures. TinEye supports JPEG, PNG and GIF images, and the upload size is limited to 20 MB. TinEye doesn't recognize the persons or objects in the picture, but it recognizes the entire picture as a whole. It can also be used to track down illegal use of copyrighted images or the stolen ones. Thus, a very useful search engine. Plus, it has browser extensions for Chrome, Firefox and Safari which is great if you are regular user of such services

2.3 Bing Image Match

In March 2014, Microsoft's very own search engine Bing came up with its very own reverse photo search tool dubbed '**Bing Image Match**'. The user can either upload the image or add it using the hyperlink and Bing will return the matching search results. It's as simple as any of its rival search engines. However, the search results weren't as satisfying as Google Images or TinEye.

2.4. Pinterest Visual Search Tool

Pinterest visual search tool is by far the most advanced reverse image technology ever developed. Announced in November 2015, the feature lets you search for visually similar images. Unlike other reverse image lookup tools where you had no choice but to search for the whole image, here you can **zoom** within a particular image and drag the zoom tool over the specific part in the Pin and search for it. **You'll see** visually similar search results to the focused part only.

III.PROPOSED SYSTEM

In our project we are using users photos as database and searching through it , after implementing the input image in the folder, the process of feature extraction take place.

The system includes following modules:

1. Input image
2. Processing
3. Output image

3.1 Module Specification:

1. Input image:

The main input image in the system will be given in the form of JPG format.

2. Processing:

Reading the image in gray scale format. apply sift algorithm to extract the features in key point and descriptor and Flann Based Matcher to decide threshold value in source image and train image. This is to be done open cv tool.

3. Output:

Number of feature match will be get display between source image and train image.

IV. WORKING OF THE SYSTEM

- First there will be authentication mechanism to ensure that the only authorized user are able to log into the system, currently it will be the username and password and in future we may add an Bio-matrix or face detection for more security.
- In this system at first the user will give the input this will in the form of the image for which the user wants the photos to be searched from the drive or folder.
- Then after giving the input you should specify the location from where the comparison would take, which for instance may the folder or disk specified by user.
- After specifying the location from where we have to compare, further the attributes of image will be extracted and stored in the form of template.
- Now the attributes from another image will also be extracted then comparison will take place. Hence the similar images will be set aside in new folder which will be again specified by the user.

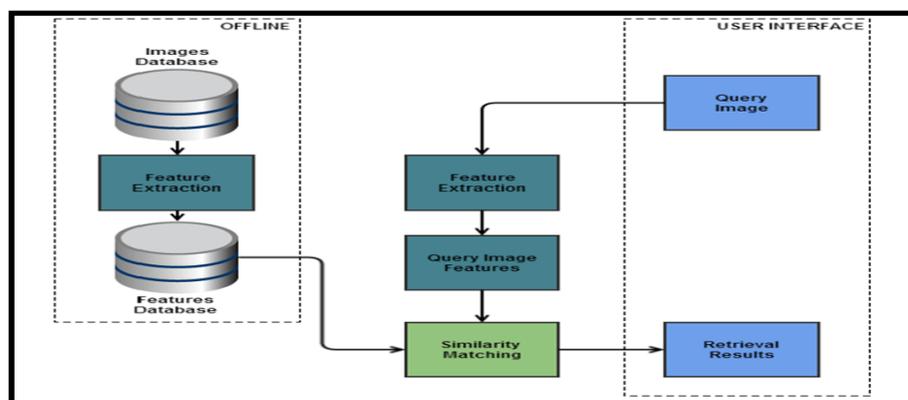


Figure 2 System flow diagram

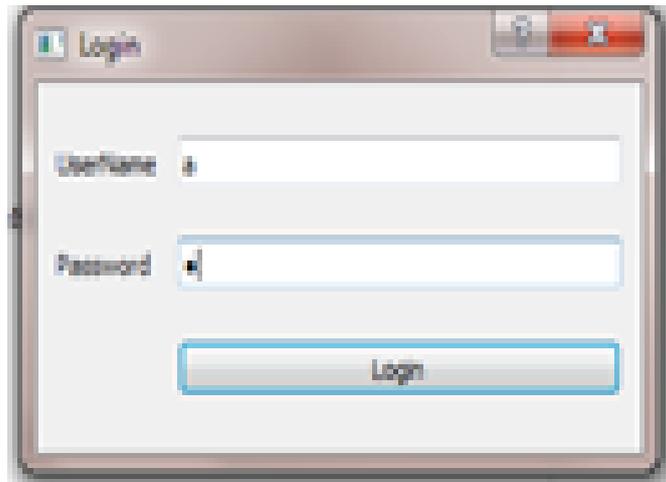


Figure 3: Authentication Window

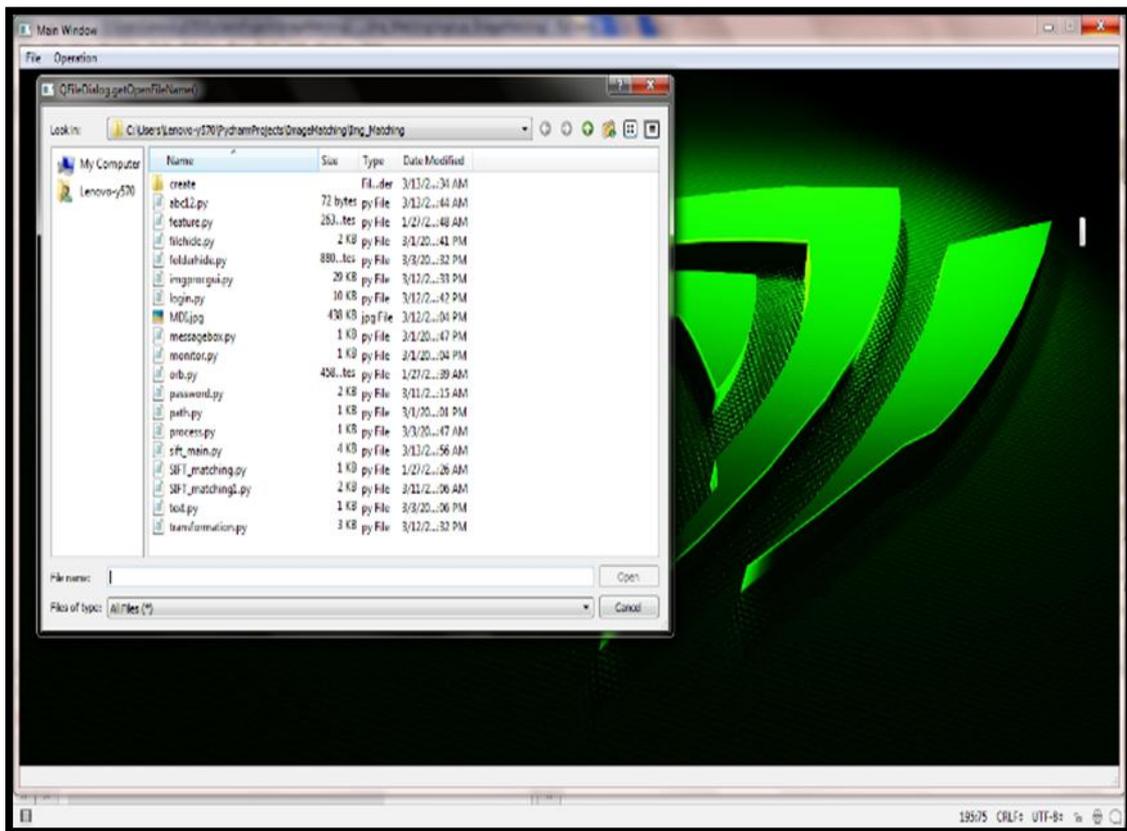


Figure 4: Selection Of Query Image

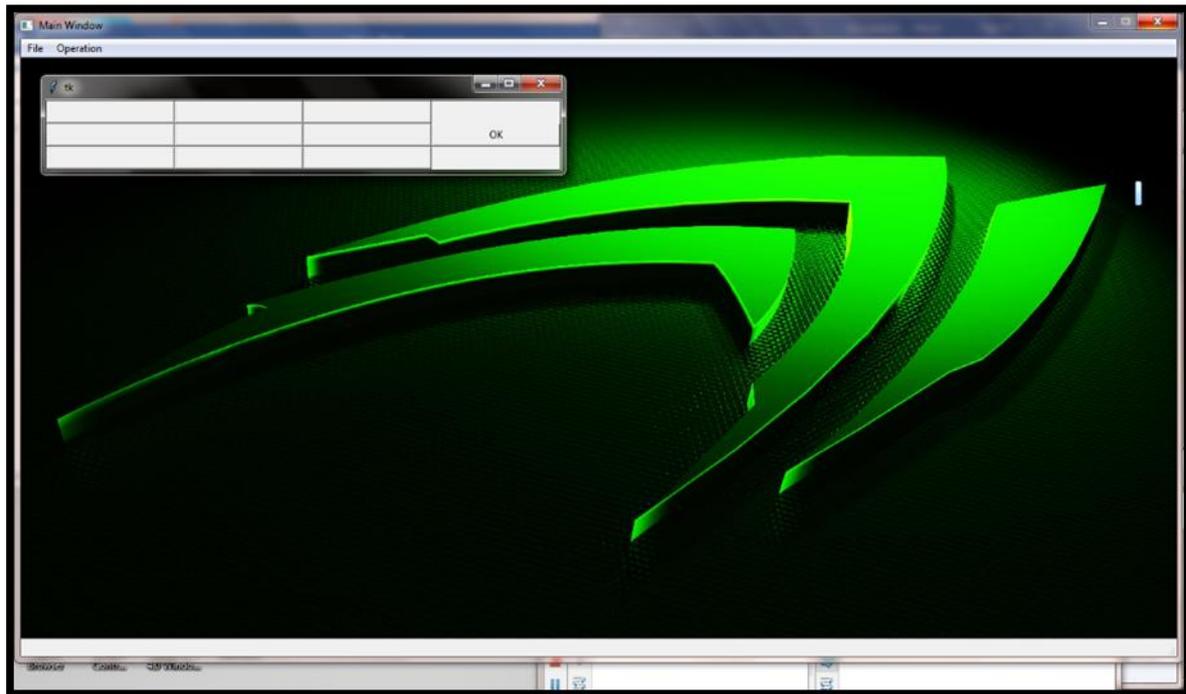


Figure 3: Authentication Window for file hider

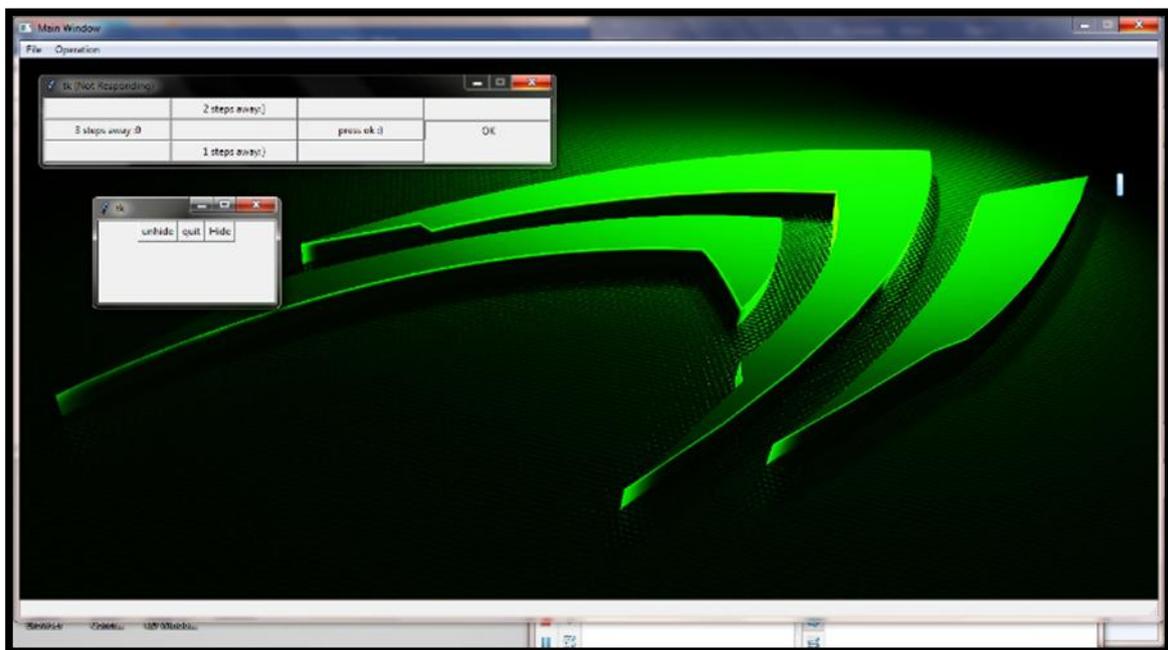


Figure 4:File hider



Figure 5: Features Being Matched

V.MERITS OF PROPOSED SYSTEM

- In existing system, the functionality to search the image offline is not available it is provided in this system.
- Application will be available in directly in executable that is without any installer setup.
- Here as compared to traditional method of searching image via name, we can search via image directly, by giving input an image.
- This application has various application such as it can be used by the police to find if any criminal exists from image only, from their database.
- It can also be used to identify about the employees in a company to verify do they exist or not etc.

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