

Volume

8

YANG'S SCIENTIFIC RESEARCH INSTITUTE, LLC.

PornSeer: Pornographic Features Detection SDK

User Guide

PORNSEER: PORNOGRAPHIC FEATURE DETECTION SDK V.1.2
(RELEASED TO PUBLIC)

PORNSEER: PORNOGRAPHIC FEATURE DETECTION SDK VERSION 1.2

User Guide

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Introduction

*PornSeer SDK is the first developers' SDK for pornographic feature detection software using **Physical Linguistic Image Understanding Engine**, which provide much lower false alarm rate than conventional skin-tone/simple shape detection based pornographic image detection technologies.*

This document addresses the performances and the programming issues using the PornSeer SDK and also the operations of the demo programs for this SDK called PicSeer, PornSeer Pro, and PornSeerTest. PornSeer was first released in January 2006 and had been maintained and revised since then by Yang's Scientific Research Institute, LLC.(Yang's Scientific).

There are two kinds of pornographic feature detection software in the market.

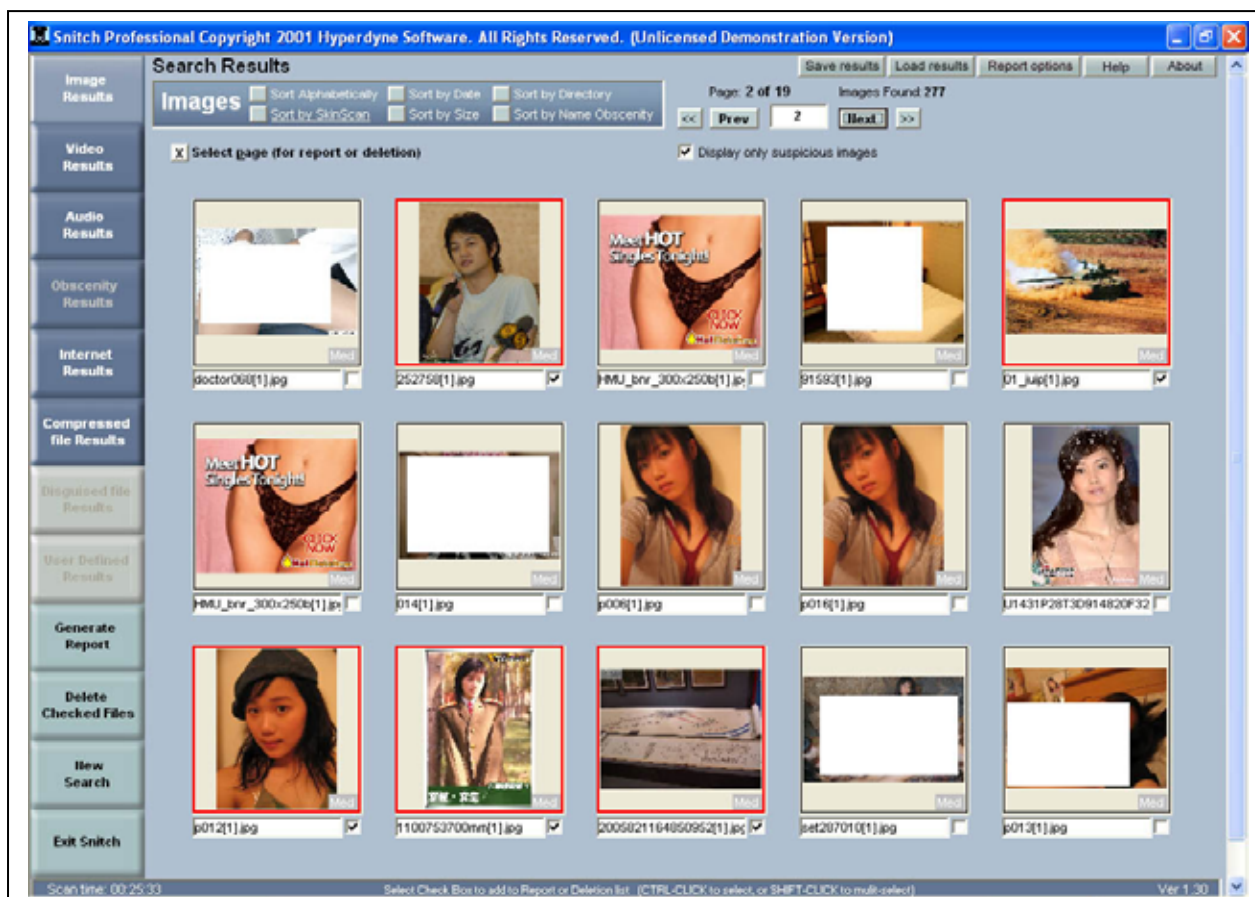
1. The dominate ones are based on skin-tone detection. The detection results generated by two

representative skin-tone based porn-detection software are shown as follows. Observe that many different kinds of innocent images had been classified as porno image. An independent test (<http://www.dansdata.com/pornsweeper.htm>) shows that this kind of software mistakenly classify as high as 50% innocent images as porno images; namely, 50% false alarm rate, when a hit rate of 85% was achieved. The picture to the left and at the top of the next



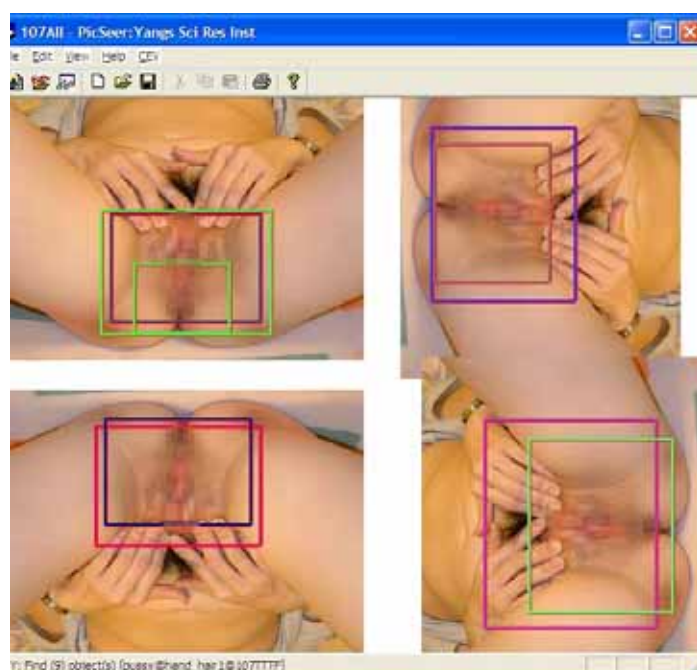
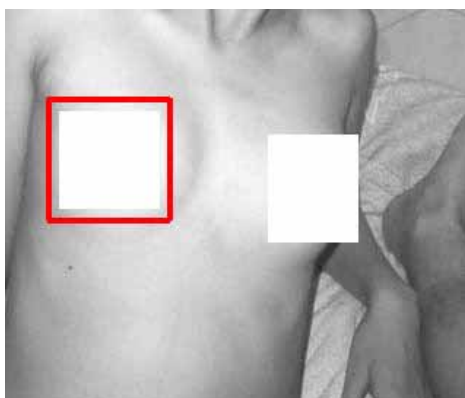
The porn detecting results of a skin-tone based porn filter: PixAlert (<http://www.pixalert.com/>). Many innocent images were classified with high scores of porn.

page show the porn-detection results of two typical skin-tone based porn-filters.



The porn detecting results of a skin-tone based porn filter: Snitch Professional (<http://www.hyperdynesoftware.com/>). Many innocent images were classified with high scores of porn.

2. PornSeer SDK based porn-detection software. This kind of brand new and much more advanced porn detection software is supported by PL Image Understanding Engine which allows the accurate detection of porno features such as breasts and vulvas. Extensive tests showed that at least **20% less** false alarm rate can be achieved comparing with the skin-tone based methods. The following four images show the detecting results of some porno features by using PornSeer SDK. Observe that porno features in both color and **black-and-white** pictures can be detected while skin-tone based method can not detect any black-and-white porno images. Also, PornSeer can detect porn-features in different directions too.



The rest of this manual will show the reader advanced demo software based on PornSeer SDK for detecting porn contents from videos and images, will also show the reader the outline of the PornSeer SDK.

This manual can be downloaded from

<http://www.yangsky.us/products/dshowseer/porndetection/PornSeePro.htm>

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Getting Started—Demos Entitled: PornSeerPro, PornSeerProTest, and PicSeer

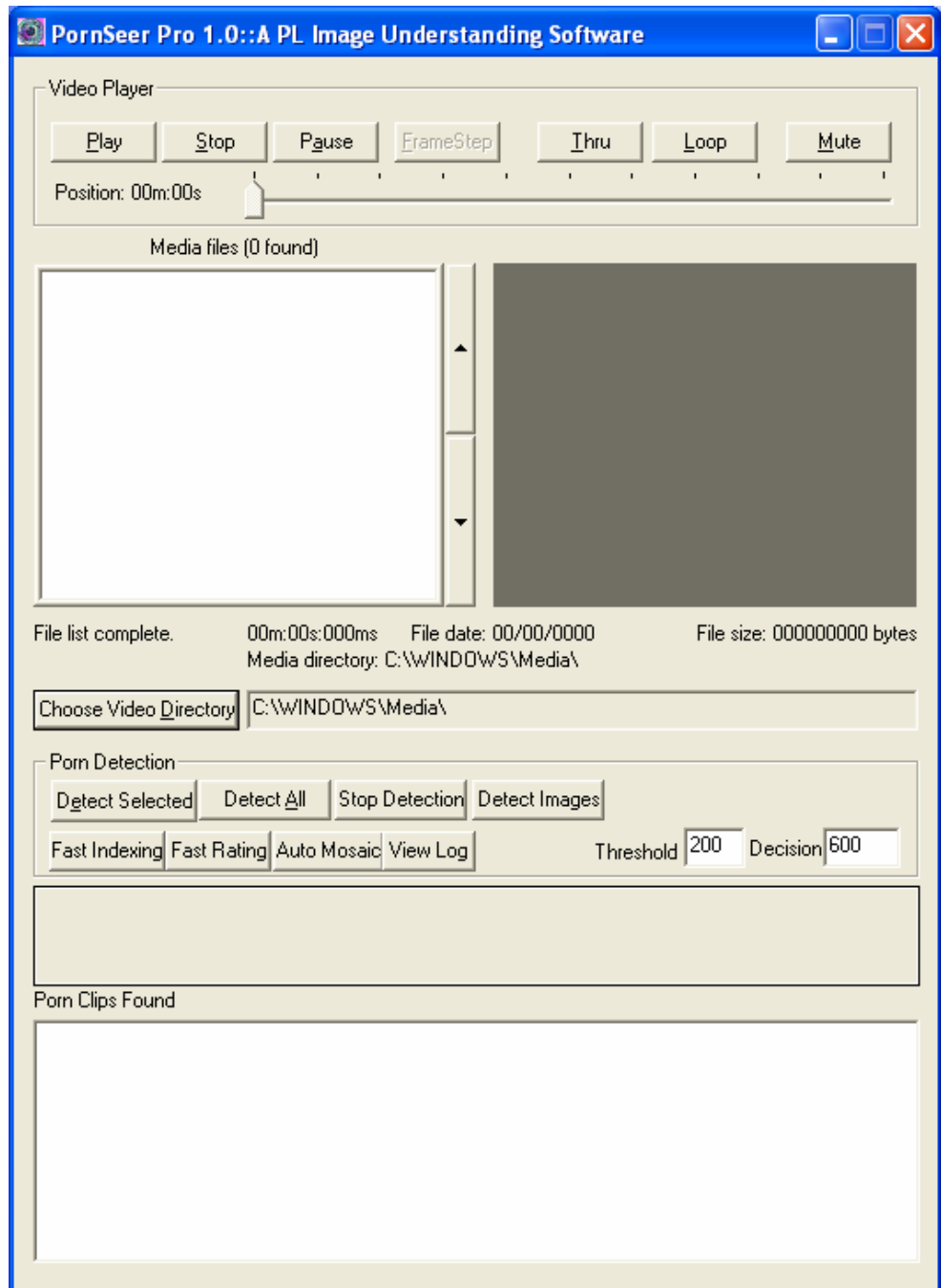
If you are evaluating the performance of PornSeer SDK, this chapter is for you. This chapter shows how to install and use there demo programs: PornSeerPro(porn video detection), PornSeerTest(porn image detection) and PicSeer(PornSeer SDK functionality demo). By running these demos, the user should get the first impression and feelings of what can PornSeer SDK do for different applications and how easy to develop porn-detection software based on PornSeer SDK.

PornSeerPro Demo of Porn Video Detection

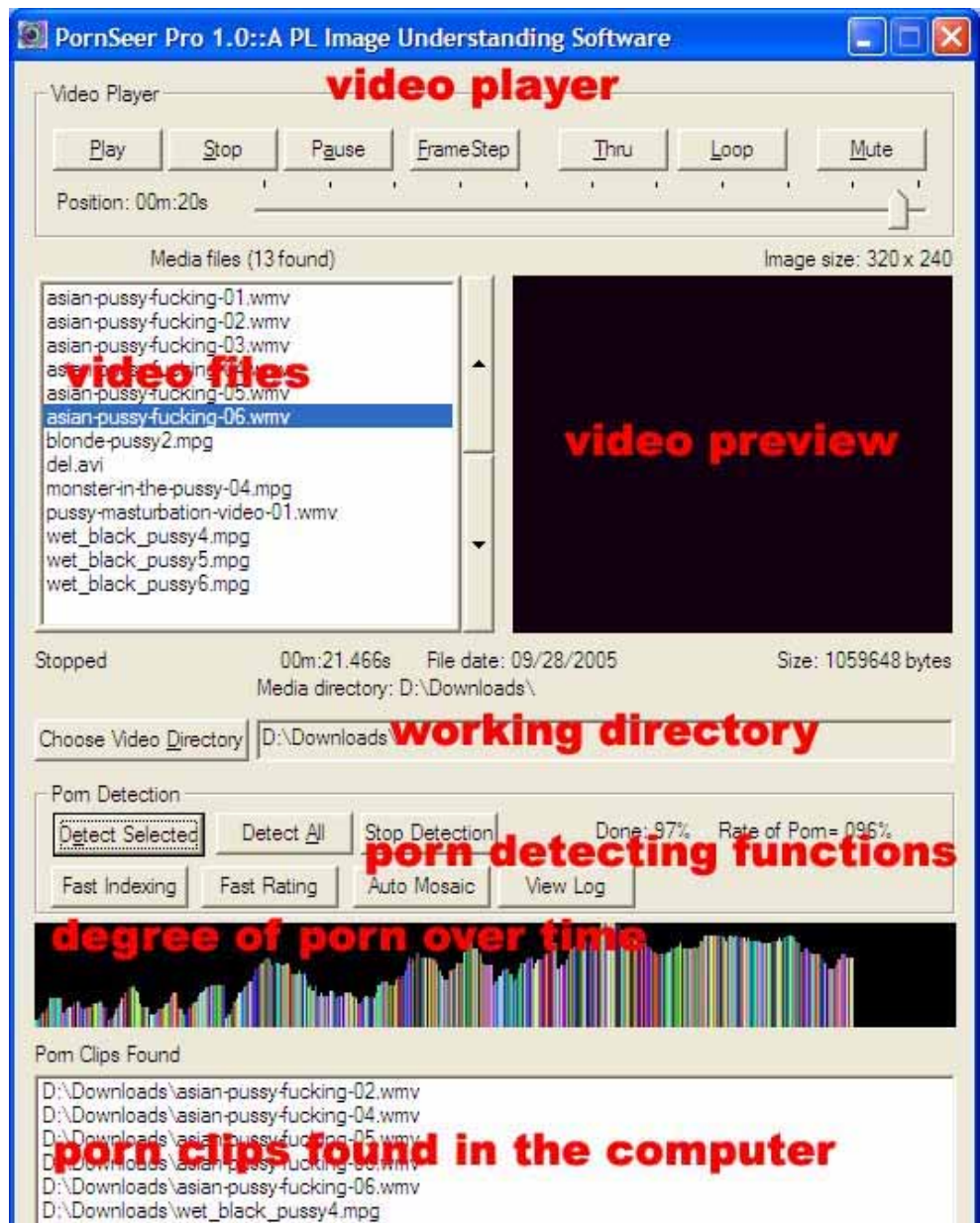
The following steps show the user to install and run the PornSeer Pro demo. You need to download the installation package, install it and then run the two programs PornSeerPro.exe and PornSeerTest.exe for detecting porn video clips and porn images, respectively.

1. Download the installation package from <http://www.yangsky.us/products/dshowseer/porndetection/PornSeePro.htm>
2. Install PornSeerPro by click on PornSeerProSetupx.x.x.x.exe downloaded from Step 1. (x.x.x.x is the version number of the package you downloaded. PornSeerPro had been updated frequently based on feedback from users). Please note that the user must install the PronSeerPro using default settings, otherwise, the demos may not work.

3. Click PornSeer Icon to bring up the following interface



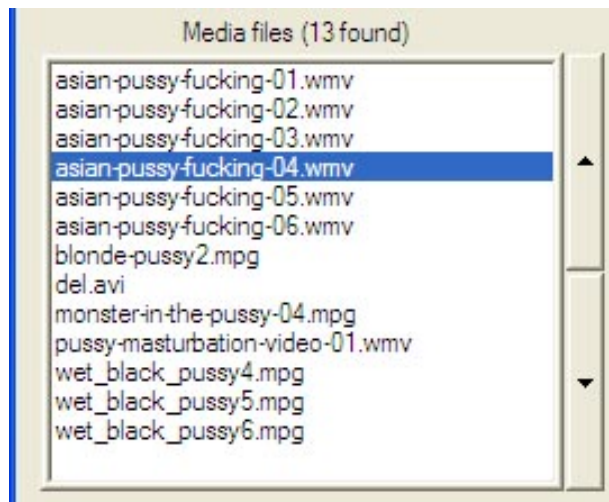
The functions of each region are illustrated as follow.



4. The first step is to load videos from a directory by choosing any file under the directory by clicking the following button:



Then all recognizable formats of video will be listed as



5. To detect porno video from the video clip list, click the high-lighted “Detect Selected” button as shown below.



The detecting results will be shown as a “Rate of Porn” (see the high-lighted region). The highest rate is 100% and the lowest is 000%. A typical porno video has a rate of bigger than 050%. (The position of the high-lighted region may vary from version to version)



A progress display is used to show the percentage that has been done for the current video clip (The position of the high-lighted region may vary from version to version)



6. Click “Detect All” to detect all video clips under a folder/directory.

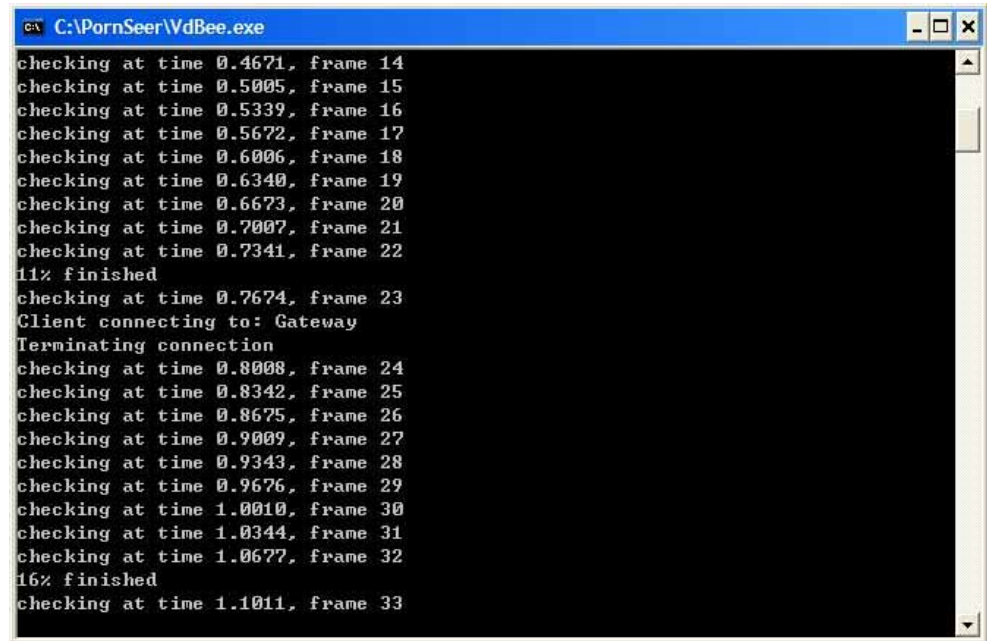


PornSeer Pro will go through all recognizable video files listed and detect them one by one. The detecting results will be recorded. You can cancel a “Detect All” process by pushing the button “Stop Detection”, which will end the detecting process as soon as the current detection finishes.



7. Porn Video Detection Process Interface.

After you push the “Detect Selected” or “Detect All” buttons, you will find the following program to pop-up, this is to show you the progress of the detecting process. Since this program is running in the background, you can just minimize its interface and let it run while you can do whatever you want to do on your computer.

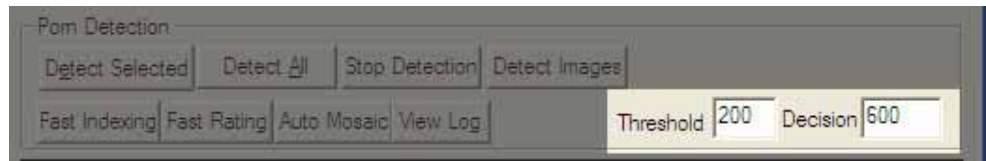


If you don't want to see the above pop-up progress reporting program, you can put it into the background by checking the check of “hide progress” highlighted as follow.



8. Porn Video Detection Parameters.

There are two parameters “Threshold” and “Decision” to control the detecting performance of the PornSeer highlighted as follows.



PornSeer Pro uses two parameters “Threshold” and “Decision” to tune the relation between hit rate and false alarm rate. The testing results against the benchmark image database show that PornSeer Pro are 25.5% better than the mainstream skin-tone based porn-detection software. See the following link for details:

<http://www.yangsky.us/products/dshowseer/porndetection/ThresholdDecision.htm>

“Threshold” defines the sensitivity of detecting a pornographic feature such as a breast or a pubic hair region. The smaller the threshold is chosen, the more sensitive PornSeer detects a porn feature. However, we can not reduce the threshold too far below 200 because when the threshold is too small, many unrelated features can mix up with those useful features. For example, a breast region is typically has a lighter and smooth surrounding region while at the center a darker and rough region. PornSeer Pro takes advantage of this spatial configuration to distinguish a breast from a dish or from a light bulb. However, if the threshold is too small, the boundary between a breast and a dish will become much blur than when the threshold is bigger. If PornSeer needs to put a great effort onto the central regions of a breast for the purpose of distinguishing a breast from a dish, it needs a relative big threshold to do so.

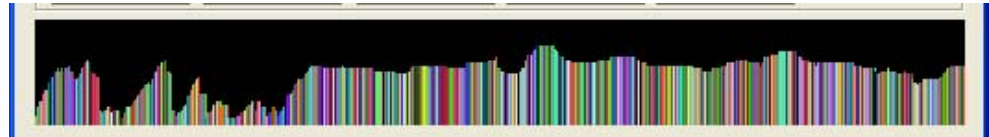
On the other hand, the threshold can not be too big either. Otherwise, a breast region with a lighter nipple will be classified as a dish. Our experience is that the optimal value for the threshold lies anywhere between 200 to 500 based on the expected false alarm rate from the range of 50% to 30%.

PornSeer Pro was designed to decouple the connection between the parameters of “Threshold” and “Decision” as much as possible. However, the relation between these two parameters does exist. We observed that a small “Threshold” is usually used together with a small “Decision” to keep the same false alarm rate and the hit rate. Yet, since the connection is no very strong, the user can tune them separately.

A big “Decision” can reduce the false alarm rate and yet, reduces the sensitivity as well. If in the video we can find lots of faces showing up or someone wearing a bra moving around, a 600 level “Decision” will be most likely to trigger a signal of porn. While a 1000 level “Decision” will be much less likely to react upon face region, it might fail to detect pornographic scenes without breasts or vulva regions. Therefore, it will depend on the nature of the video clip and the priority of the detecting task to guide the choice of “Decision”. If one wants to have a high hit rate, he might want to choose a

low “Decision” level that is around 500. If one wants to get a very low false alarm rate, he might want to increase the “Decision” level to 1000 or more.

9. The curve in the following window shows the degree of being a porn video along time. This is of course very useful for monitoring the working condition of PornSeer Pro. All these data will be available to a log file.



10. The locations of the porn videos found in the computer are displayed in the window shown as follow. You can select any video in the list to preview it. For very long movie, PornSeer Pro registered user can let PornSeer to show only the portion of video file where porn features were detected and ignore the rest of the movie. For unregistered user, the movie can be viewed manually.

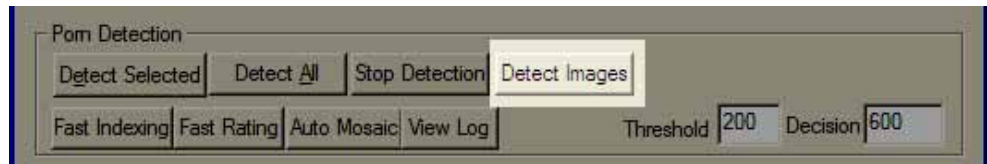


11. PornSeer Pro is also a video player that can help the user to fast browser the video to see the connection between the reports from PornSeer and the contents of the videos. The following are the control panel of the built-in video player.



12. Where to get testing video clips? Since face images are the most common innocent ones that might be mistakenly classified as dirty images, you can download video containing lots of faces to test the resistance of PornSeer Pro to false alarms. If PornSeer Pro can survive video containing big faces, you can take it for sure that it can survive much easier to other type of videos. You can go to Yahoo video to search and download different kinds of short video clips for your test.
13. Want to help us to improve the detecting results? If you come across a video clips that PornSeer Pro can not classify correctly, please send the link of that video clip and the misclassification types such as: “failed detection porn”, “false alarm”, etc to us at sales@YangSky.us Thank you and enjoy a more clearly defined Internet!
14. When we need to detect pornographic images, the following button should

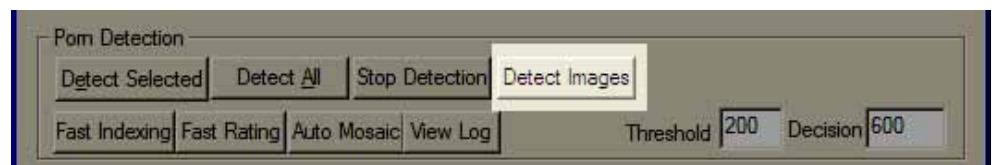
be pressed to evoke PornSeerTest.exe. The next section will address the functionalities of PornSeerText.exe.



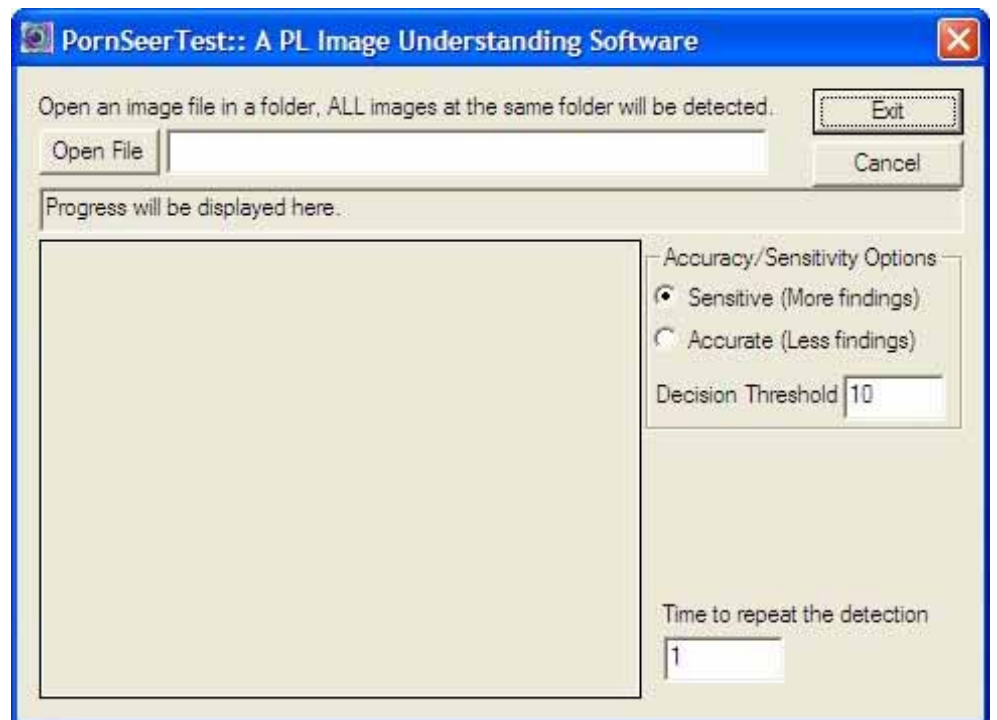
PornSeerTest Demo of Porn Image Detection

The following steps show the user how to run the PornSeerTest demo for detecting pornographic images. We assume that you have downloaded and installed the PornSeerPro packages. And the interface of PornSeerPro.exe has been evoked.

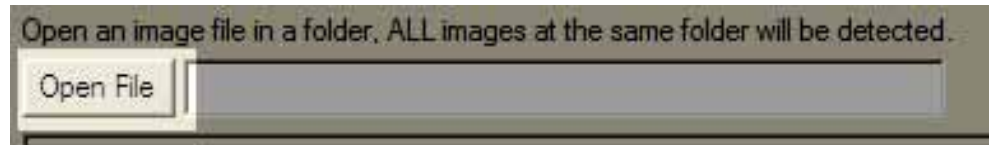
1. From the interface of PornSeerPro.exe, click “Detect Image” button highlighted as follow



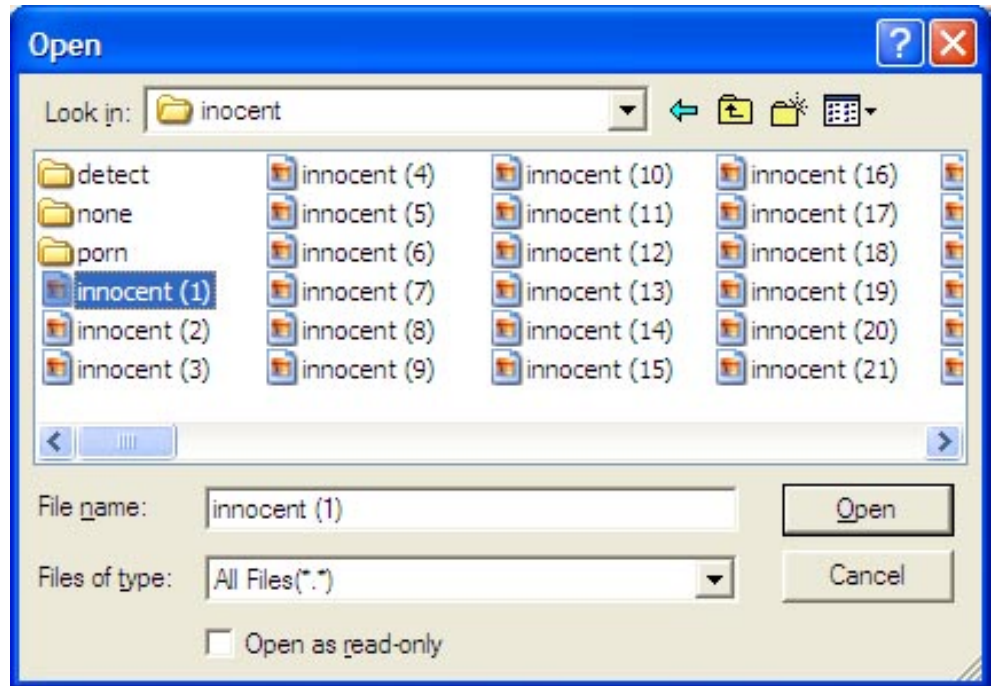
2. After we push the button “Detect Image” from the PornSeer Pro interface, the porn image detection interface shown as follow will pop up. The functions of each portion of this interface are listed as follows.



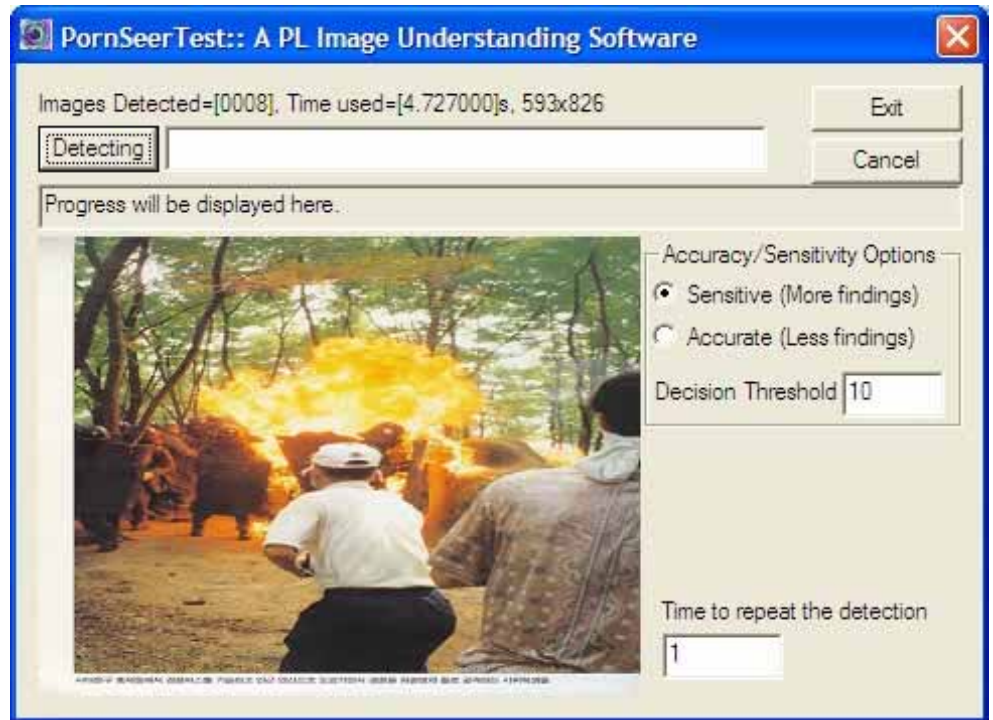
3. Push the “Open File” button to open the image folder that you want to scan for pornographic images.



4. You will most likely see the following folder browser interface. Choose any file under the folder that you want to scan, in this example, the folder we want to scan is “..\inocent”



5. After you press the “Open” button, PronSeerTest will scan the image folder you just chose. This will take a while if there are many images under this folder and if you shift the focus out the PornSeerTest interface, this interface will be halt while it scans the folder. You don’t need to do anything but wait for the scanning ends.

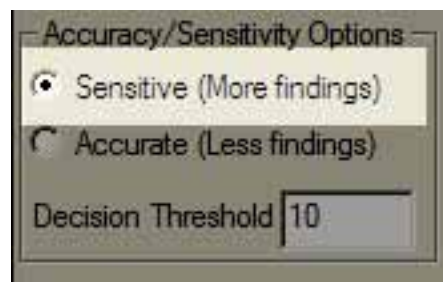


6. After the scan finished, you can find the results from two newly generated folders under the image folder you chose; in our case, the folder “..\inocent”. PornSeerTest will put the detected porn image files under folder “..\inocent\porn” and the clean images under folder “..\inocent\none”. The following image shows a portion of the folder “..\inocent\none”.

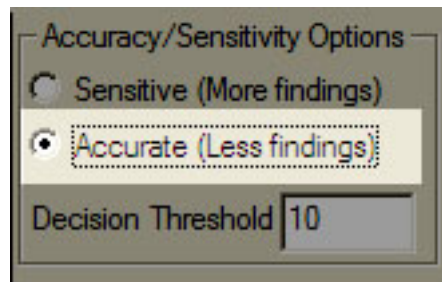
Observe that in this folder, file names are followed a special convention: [degree to be porn]_[original file name]. For example, the file name “05.37_innocent (119).jpg” denotes that the original image file “innocent (119).jpg” has a degree to be porn of “05.37”. Similarly, the file named “00.00_innocent (177).jpg” denotes that the image file “innocent (177).jpg” has a degree to be porn of “00.00”. By using this name convention, we can easily to check the detection results generated by PornSeerTest and based on which we can refine the parameters that will be discussed next.



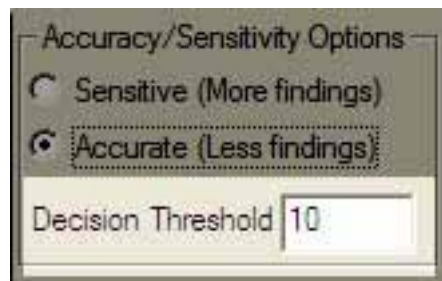
7. When the “Sensitive (More findings)” radio button is checked, we can find more results with big hit rate and with more false alarms.



8. When the “Accurate (Less findings)” radio button is checked, we can find less results with less hit rate and also less false alarms. Therefore, the results are more accurate because less false results are included.



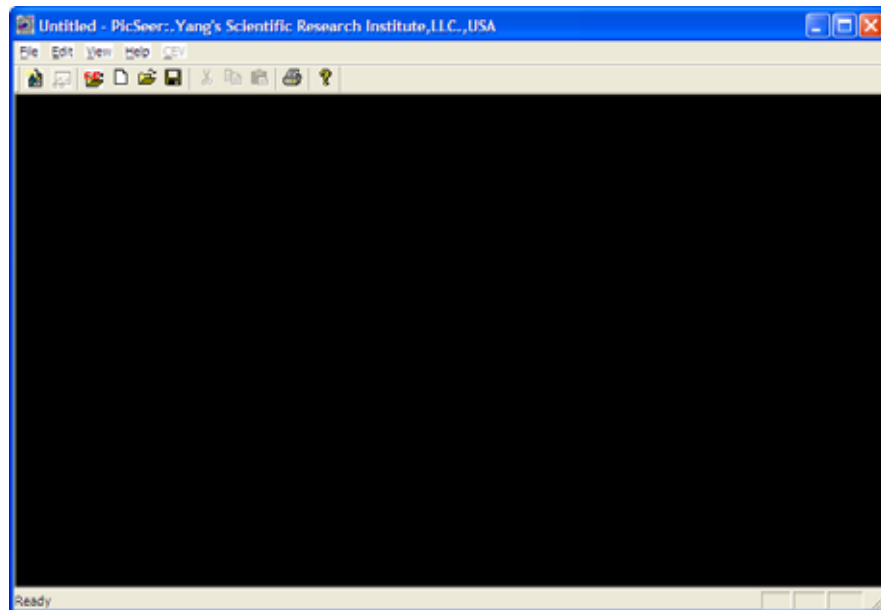
9. The parameter of “Decision Threshold” can be set by the users as a cut-off point for porn and clear images. It is the threshold for the “degree to be porn” as shown in the image name convention just mentioned. The users can test a few sets of results to choose the optimal parameters for their specific applications. The default parameters are the optimal value for Yang’s Benchmark Image Database for Porn-Detection Software. After you enter a new value, you don’t need to hit the return key.



PicSeer Demo of the Functionalities of PornSeer SDK


The following steps show the user to install and run the PicSeer demo. This is a clean software which means that when you delete all files under the current folder where you unzipped all its components into, it will leave no trace in your computer. Please follow the following steps and please note that all files should be extracted into **the same** folder because PicSeer will find all components under the root folder where the PicSeer.exe installed, otherwise, it will malfunction.

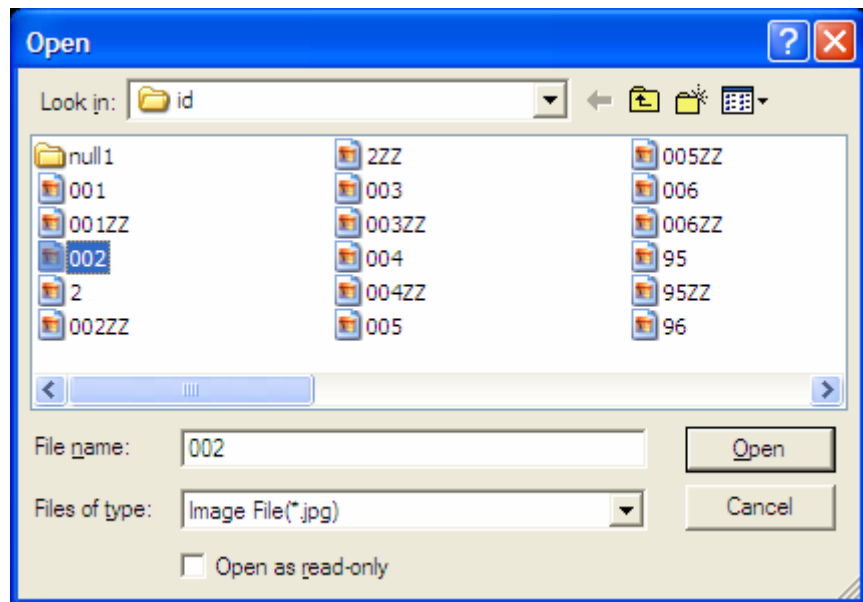
1. Download the package of PicSeer from <http://www.yangsky.us/products/dshowseer/porndetection/PornSeePro.htm>
2. Unzip all files in PicSeer.zip into the same folder.
3. Go to the folder and double click PicSeer.exe. Then you will see the main interface of PicSeer as



4. From the tool bar




click the first icon  to bring up the following image browser interface:



choose any image and then press the button “Open”, you will see the chosen image loaded into the PicSeer as (mosaic patterns were added manually to block the most offensive features in the following two images)



5. From the tool bar click the second icon , then the breasts, face and vulva will be detected and marked by using green rectangle as follow:



Notes:

1. The hit rate (a right feature can be classified successfully) and the false alarm rate (a wrong feature is misclassified) can be controlled by the user using the parameter control in PornSeer SDK. For pornographic detection purpose, many other choices of features can be added easily into this platform. The processing speed can be enhanced for very big images such as those with 5M pixels using the switches in the SDK.
2. Each feature is now tested in 4 directions at the same scan. For example, all upright, left-horizontal, right-horizontal and downright faces are detected at the same scan. The PicSeer Demo scans 18-different features at each scan and the real-time scan speed can be achieved for video applications.
3. For different applications, we can provide different combination of features detectors to optimize the testing speed and accuracy.
4. For pornographic image detection purpose, we can also use skin color information to control the false alarm rate.

Examples of PornSeer SDK Functions and Their Usages

If you are now developing your own software using PornSeer SDK, this chapter can serve as the starter's references for different functions in PornSeer SDK.

The PornSeer SDK was programmed using C++\C language and based on the PL image understanding Engine which was also programmed using C++\C language. The functions listed in this section will show you the basic functionalities of PornSeer SDK. What follows are not a complete list of all functions in PornSeer SDK, however, they provide the most important functionalities of PornSeer SDK. The developers can find more technical details from the user's manual in the PornSeer SDK package.

Basic Structures

The most common used basic data structures are listed as follow.

OpPoint: 2D point of integer coordinates

```
typedef struct OpPoint
{
    int x;        /* zero-based x-coordinate of this 2D point*/
    int y;        /* zero-based y-coordinate of this 2D point*/
} OpPoint;

/* the constructor function */
inline OpPoint opPoint( int x, int y );
```

OpSize: integer size of a rectangle

```
typedef struct OpSize
{
    int width;    /* width of the rectangle */
    int height;  /* height of the rectangle */
} OpSize;

/* the constructor function */
inline OpSize opSize( int width, int height );
```

OpRect: upper-left point and size of a rectangle

```
typedef struct OpRect
{
    int x;        /* x-coordinate of the left-most corner */
    int y;        /* y-coordinate of the top-most corner */
    int width;    /* width of the rectangle */
    int height;   /* height of the rectangle */
} OpRect;

/* the constructor function */
inline OpRect opRect(int x,int y,int width,int height);
```

OpImage: the 2D image data

```
typedef struct OpImage
{
    OpSize size;      /* size of the image */
    int nChannels;    /* number of channels 1 or 3 */
    unsigned char* data; /* the image data */
} OpImage;
```

OpSkinColorType: the types of skin colors

```
typedef enum OpSkinColorType
{
    GRAY = 0,          /* gray, black and white image */
    AFRICAN_ALL,      /* all African skin tones */
    AFRICAN_0,        /* Pallor-African */
    AFRICAN_1,        /* Midtone-African */
    AFRICAN_2,        /* Tanned-African */
    ASAIN_ALL,        /* all Asian skin tones*/
    ASAIN_0,          /* Pallor-Asian */
    ASAIN_1,          /* Midtone-Asian */
    ASAIN_2,          /* Tanned-Asian */
    CAUCASIAN_ALL,   /* all Caucasian skin tones*/
    CAUCASIAN_0,     /* Pallor-Caucasian */
    CAUCASIAN_1,     /* Midtone-Caucasian */
    CAUCASIAN_2,     /* Tanned-Caucasian */
    ALL               /* all skin colors */
}
```

```
} OpSkinColorType;
```

OpHumanBodyFeatureType: the types of human body features

```
typedef enum OpHumanBodyFeatureType
{
    PORN_ALL,          /* all pornographic features */
    BREAST_ALL,        /* all breast features */
    BREASE,            /* a single breast, front view */
    BREASES,           /* a pair of breasts, front view */
    BREASE_P,          /* a single breast, profile view */
    BREASES_P,         /* a pair of breasts, profile view */
    FACE_ALL,          /* all face features */
    FACE,              /* face, front view */
    FACE_P,            /* face, profile view */
    PUBIC_ALL,         /* all pubic region features */
    PUBIC,             /* pubic region*/
    PUBIC_HAIR,        /* pubic hair region*/
    SEX_ALL,           /* all sex position features */
    SEX_BJ,            /* blowjob sex position, front view*/
    SEX_BJ_P,          /* blowjob sex position, profile view*/
    SEX_COWGIRL,       /* cowgirl sex position*/
    VULVA_ALL,         /* all vulva features*/
    VULVA,             /* vulva */
    VULVA_HAIR,        /* vulva with hair*/
    VULVA_HAND,        /* vulva with hand/fingers*/
    PORN_NONE          /* no pornographic features */
} OpHumanBodyFeatureType;
```

OpHumanBodyFeature: the structure for of human body feature

```
typedef struct OpHumanBodyFeature
{
    OpRect range;      /* the rectangle range */
    double orientation; /* orientation in degree of this feature */
    OpSkinColorType color; /* skin color */
    OpHumanBodyFeatureType name; /* feature name */
} OpHumanBodyFeature;
```

OpSeqBodyFeature: Growable sequence of elements with the type of OpHumanBodyFeature

The user doesn't need to know the inner details of this structure. It is used to store the sequences of OpHumanBodyFeature found from images. PornSeer SKD provide very simple and yet flexible way to visit elements in an OpSeqBodyFeature.

Breast(s) Detection Functions

The functions listed in this section can detect a single breast or a pair of breasts for different poses and positions from images.

OpFindBreast: find isolated breasts from user supplied image data

```
int OpFindBreast(const OpImage* src, OpSeqBodyFeature* breasts,  
OpHumanBodyFeature* descriptions=0, OpImage* dst = 0,  
OpDrawMethod method=LINE);
```

src

INPUT: source image to detect.

breasts

OUTPUT: sequence of found breasts.

descriptions

INPUT: the way to find the breasts.

=0: if detect full image, color off, accurate method.

dst

OUTPUT: destination image to draw the breast regions.

Support in place

=0: if we don't want to draw.

method

INPUT: the method to draw breast regions on dst.

RETURN

=1: if success

Otherwise: if failed, error code.

OpFindBreast: find isolated breasts from an image file

```
int OpFindBreast(const char* image_path, OpSeqBodyFeature*  
breasts, OpHumanBodyFeature* descriptions=0, OpImage* dst = 0,  
OpDrawMethod method=LINE);
```

image_path

INPUT: the path for the image file to detect.

breasts

OUTPUT: sequence of found breasts.

descriptions

INPUT: the way to find the breasts.

=0: if detect full image, color off, accurate method.

dst

OUTPUT: destination image to draw the breast regions.

Support in place

=0: if we don't want to draw.

method

INPUT: the method to draw breast regions on dst.

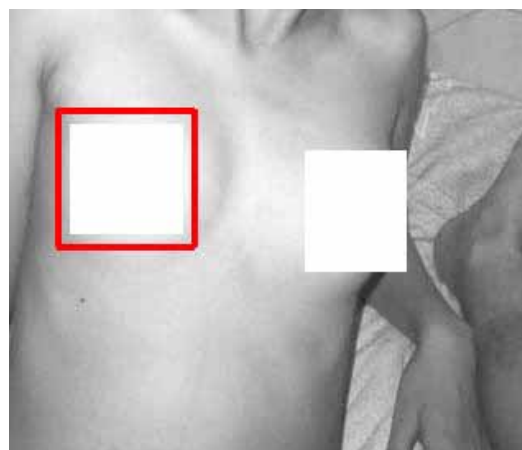
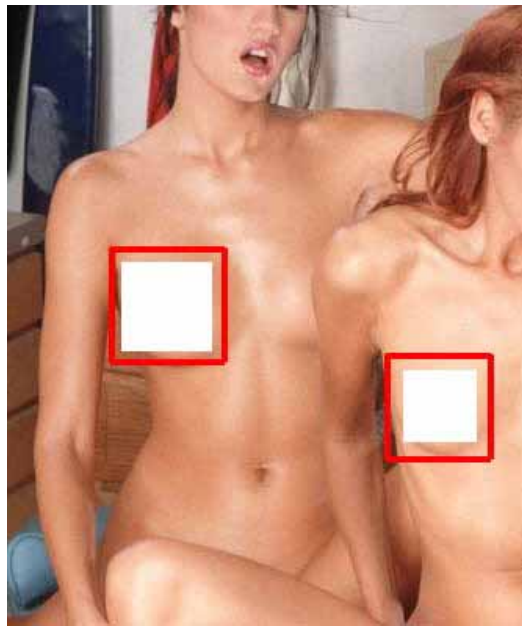
REURN

=1: if success

Otherwise: if failed, error code.

Examples

Isolated breasts can be detected in different direction, here we only show the detection results for up-right orientations.



OpFindBreasts: find pairs of breasts from user supplied image data

```
int OpFindBreasts(const OpImage* src, OpSeqBodyFeature* breasts,  
OpHumanBodyFeature* descriptions=0, OpImage* dst = 0,  
OpDrawMethod method=LINE);
```

src

INPUT: source image to detect.

breasts

OUTPUT: sequence of found breasts.

descriptions

INPUT: the way to find the breasts.

=0: if detect full image, color off, accurate method.

dst

OUTPUT: destination image to draw the breast regions.

Support in place

=0: if we don't want to draw.

method

INPUT: the method to draw breast regions on dst.

REURN

=1: if success

Otherwise: if failed, error code.

OpFindBreasts: find pairs of breasts from an image file

```
int OpFindBreasts(const char* image_path, OpSeqBodyFeature*  
breasts, OpHumanBodyFeature* descriptions=0, OpImage* dst = 0,  
OpDrawMethod method=LINE);
```

image_path

INPUT: the path for the image file to detect.

breasts

OUTPUT: sequence of found breasts.

descriptions

INPUT: the way to find the breasts.

=0: if detect full image, color off, accurate method.

dst

OUTPUT: destination image to draw the breast regions.

Support in place

=0: if we don't want to draw.

method

INPUT: the method to draw breast regions on dst.

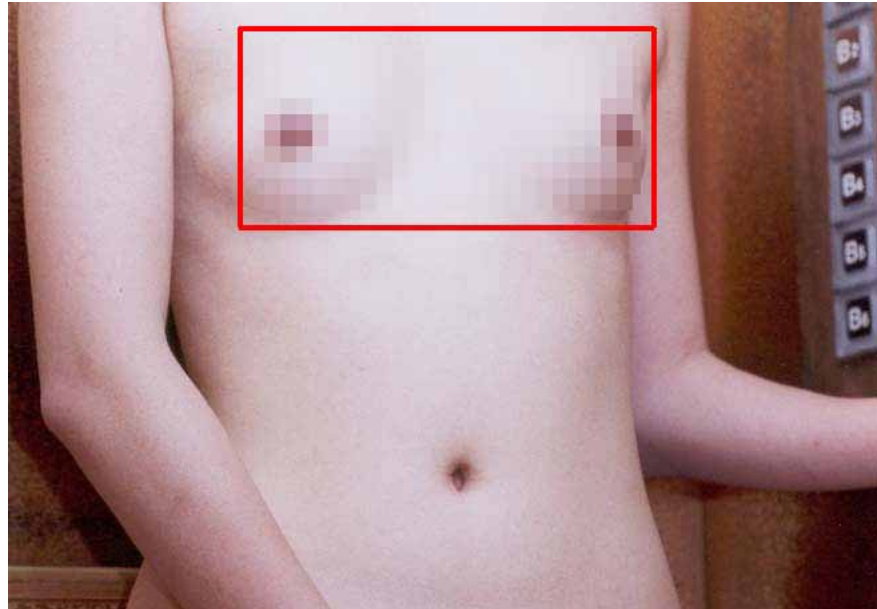
REURN

=1: if success

Otherwise: if failed, error code.

Examples

Pair of breasts can be detected in different directions, here we only show the detection results for up-right orientations.



Face Detection Functions

The functions listed in this section can detect faces for different poses and positions from images.

OpFindFace: find faces from user supplied image data

```
int OpFindFace(const OpImage* src, OpSeqBodyFeature* face,  
OpHumanBodyFeature* descriptions=0, OpImage* dst = 0,  
OpDrawMethod method=LINE);
```

src

INPUT: source image to detect.

face

OUTPUT: sequence of found face.

descriptions

INPUT: the way to find the face.

=0: if detect full image, color off, accurate method.

dst

OUTPUT: destination image to draw the face regions.

Support in place

=0: if we don't want to draw.

method

INPUT: the method to draw face regions on dst.

RETURN

=1: if success

Otherwise: if failed, error code.

OpFindFace: find faces from an image file

```
int OpFindFace(const char* image_path, OpSeqBodyFeature* face,  
OpHumanBodyFeature* descriptions=0, OpImage* dst = 0,  
OpDrawMethod method=LINE);
```

image_path

INPUT: the path for the image file to detect.

face

OUTPUT: sequence of found face.

descriptions

INPUT: the way to find the face.

=0: if detect full image, color off, accurate method.

dst

OUTPUT: destination image to draw the face regions.

Support in place

=0: if we don't want to draw.

method

INPUT: the method to draw face regions on dst.

REURN

=1: if success

Otherwise: if failed, error code.

Examples

Vulva Detection Functions

The functions listed in this section can detect vulva regions for different poses and positions from images.

OpFindVulva: find vulvas from user supplied image data

```
int OpFindVulva(const OpImage* src, OpSeqBodyFeature* vulva,  
OpHumanBodyFeature* descriptions=0, OpImage* dst = 0,  
OpDrawMethod method=LINE);
```

src

INPUT: source image to detect.

vulva

OUTPUT: sequence of found vulva.

descriptions

INPUT: the way to find the vulva.

=0: if detect full image, color off, accurate method.

dst

OUTPUT: destination image to draw the vulva regions.

Support in place

=0: if we don't want to draw.

method

INPUT: the method to draw vulva regions on dst.

RETURN

=1: if success

Otherwise: if failed, error code.

OpFindVulva: find vulvas from an image file

```
int OpFindVulva(const char* image_path, OpSeqBodyFeature* vulva,  
OpHumanBodyFeature* descriptions=0, OpImage* dst = 0,  
OpDrawMethod method=LINE);
```

image_path

INPUT: the path for the image file to detect.

vulva

OUTPUT: sequence of found vulva.

descriptions

INPUT: the way to find the vulva.

=0: if detect full image, color off, accurate method.

dst

OUTPUT: destination image to draw the vulva regions.

Support in place

=0: if we don't want to draw.

method

INPUT: the method to draw vulva regions on dst.

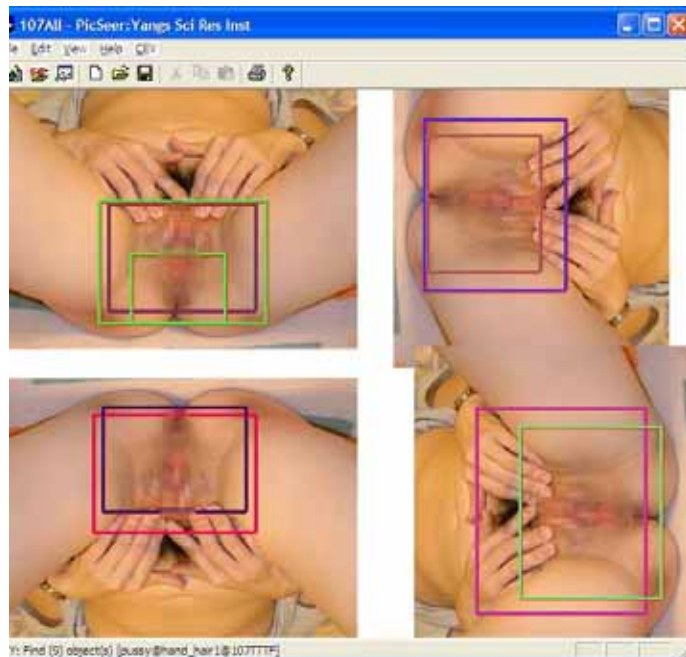
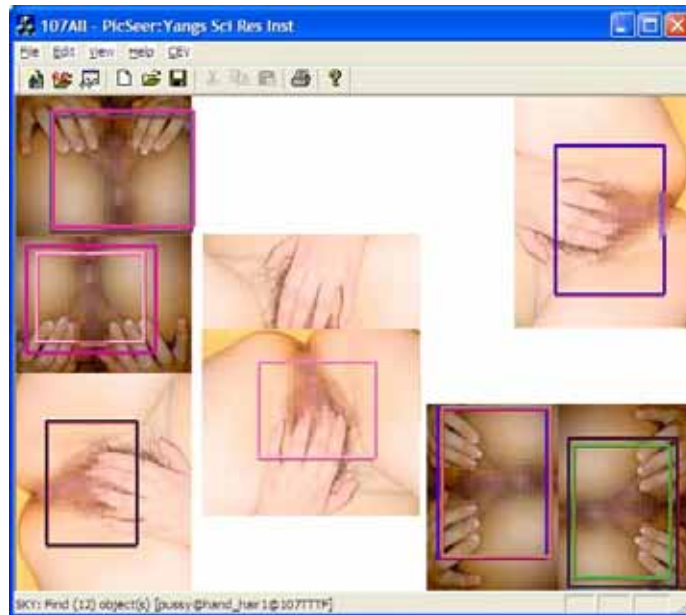
RETURN

=1: if success

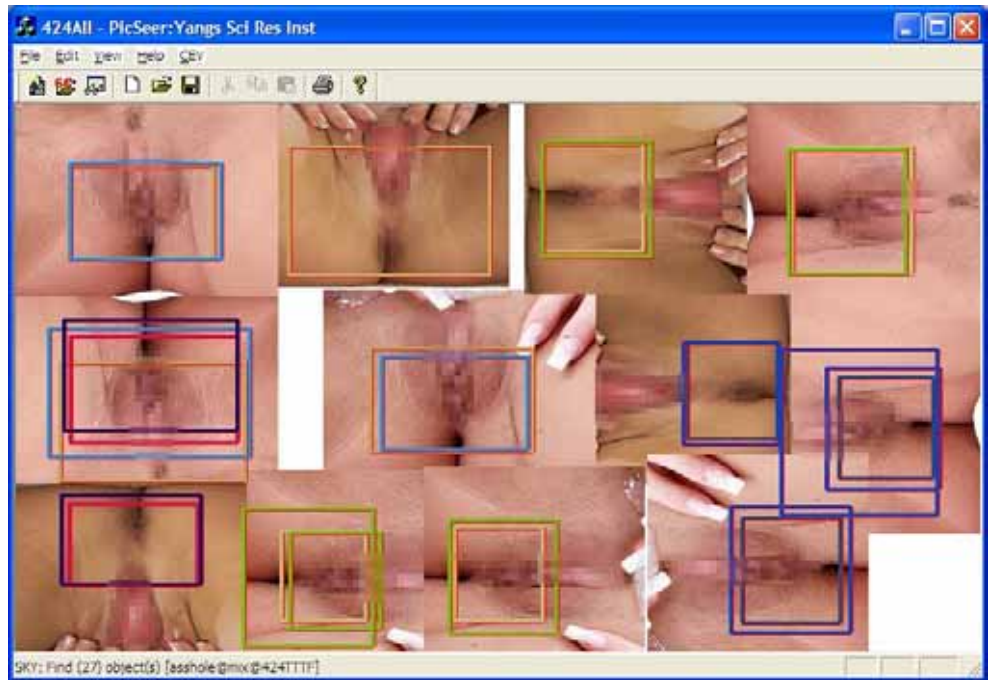
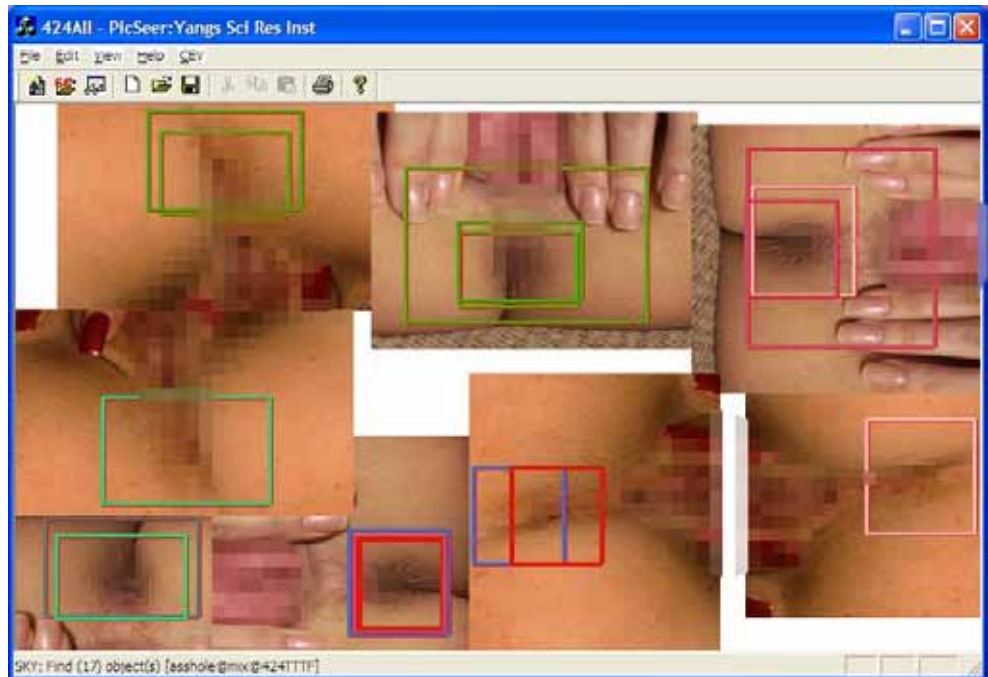
Otherwise: if failed, error code.

Examples

Different directions of vulva with hand are detected by using one scan.



Anus in different directions near vulvas can also be detected by using one scan.



Porn Detection Functions

The functions listed in this section can detect pornographic features including breasts, vulva regions outside the face region for different poses and positions from images.

OpFindPorn: find regions of pornographic features from user supplied image data

```
int OpFindPorn(const OpImage* src, OpSeqBodyFeature* porn,  
OpHumanBodyFeature* descriptions=0, OpImage* dst = 0,  
OpDrawMethod method=LINE);
```

src

INPUT: source image to detect.

porn

OUTPUT: sequence of found pornographic features.

descriptions

INPUT: the way to find the porn.

=0: if detect full image, color off, accurate method.

dst

OUTPUT: destination image to draw the porn regions.

Support in place

=0: if we don't want to draw.

method

INPUT: the method to draw porn regions on dst.

RETURN

=1: if success

Otherwise: if failed, error code.

OpFindPorn: find regions of pornographic features from an image file

```
int OpFindPorn(const char* image_path, OpSeqBodyFeature* porn,  
OpHumanBodyFeature* descriptions=0, OpImage* dst = 0,  
OpDrawMethod method=LINE);
```

image_path

INPUT: the path for the image file to detect.

porn

OUTPUT: sequence of found porn.

descriptions

INPUT: the way to find the porn.

=0: if detect full image, color off, accurate method.

dst

OUTPUT: destination image to draw the porn regions.

Support in place

=0: if we don't want to draw.

method

INPUT: the method to draw porn regions on dst.

REURN

=1: if success

Otherwise: if failed, error code.

Examples

Notes

PornSeer provides many ways to combine different features into a “super feature” for the purpose of either enhance the detection accuracy or optimize the processing speed. Those functions and methods can be found in the manual of PornSeer SDK package.

Troubleshooting

This chapter shows how to resolve some common issues that might come across when developing programs using PornSeer SDK.

The details can be found from the same section of the user manual for PornSeer SDK.

FQAs

This chapter includes the FQAs concerning all issues of BarSeer.

The details can be found from the same section of the user manual for PornSeer SDK.

Where Can I Get my first Demo of PornSeer SDK?

You can download a pool of demos from

<http://www.yangsky.us/products/dshowseer/porndetection/PornSeePro.htm>

Support and Ordering Information

This chapter includes the supporting and ordering information for PornSeer SDK.

To order PornSeer SDK or to get support for PornSeer SDK related product is simply a few clicks away.

How to Order

Send your check or money order to

Sales Department, Yang's Scientific Research Institute, 1303 East University Blvd.
#20882, Arizona 85719-0521, USA.

Please make your check or money order payable to ***Yang's Scientific Research Institute.***

For prices of PornSeer SDK and related products, please send an email to sales@yangsky.us.

Support Information

For ender users, please refer to FQA sections of this User Guide for the most common problems. If you can not find the solution from FQA sections, please send an email to sales@yangsky.us or send a ticket via <http://www.yangsky.us/support/>.

Demos

The demos of PornSeer Pro can be found at the following link:

PORNSEER: PORNOGRAPHIC FEATURE DETECTION SDK
V.1.1.2 (RELEASED TO PUBLIC)

<http://www.yangsky.us/products/dshowseer/porndetection/PornSeePro.htm>

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