

What is claimed is:

1. An image recognition system, comprising:

a robot, having an image collection module, configured to drive the image collection module to collect an image in a view of the robot by an image collection drive module;

a light source configured to fill the light when the image collection module collecting an image;

a face detection module configured to locate a face image in the image collected by the image collection module;

a face recognition module configured to implement a preprocessing for the located face image, then the preprocessed face image being compared with an image feature information of a known identity contained in a database, to determine an identity information and a confidence rate of the present face image;

the robot can implement a real-time adjustment for framing scope or angle of the image collection module through a motor, the image collection module detects people crossing within visual scope of it, the image collection module can implement real-time tracking snapshot by the motor;

the database comprises a local data memory module and a web server data memory module;

the local data memory module adopts face recognition technology

according to feature matching, the local data memory module makes the feature database of face image of a known identity, secondly it extracts a same type of feature according to the face image of real-time collection, comparing feature distance of present face to the feature distance of the database face through a math distance function, finally, it determines possible identity, and gives out the confidence rate.

2. The image recognition system as claimed in Claim 1, wherein the image collection module is a high definition camera, the high definition camera is capable to obtain static image and to collect at least 30 images per second;

the high definition camera is connected to the robot by a MIPI or a USB interface.

3. The image recognition system as claimed in Claim 1, wherein the light source comprises an ambient light source and an infrared light source;

upon utilizing the ambient light to fill the light and collecting the image by the image collection module, if the collected image can not be recognized, the light is filled by the infrared light source.

4. The image recognition system as claimed in Claim 1, the

preprocessing comprising:

executing an angle correction treatment and a light treatment for the face image presenting in the image.

5. The image recognition system as claimed in Claim 1, wherein the robot further comprises a sounding device connected to the database, the sounding device sends out various types of prompt tones according to a comparative result from the face recognition module.

6. The image recognition system as claimed in Claim 1, further comprising a record feedback device to record and/or feed back a comparative result from the face recognition module.

7. The image recognition system as claimed in Claim 1, wherein the face recognition module implements a comparison by SVM algorithm.

8. An image recognition method, using an image recognition system as claimed in any one of Claims 1-7, comprising the steps of:

(a) collecting an image in the view of the robot by the image collection module of the robot while filling the light by a light source;

(b) using the face detection module to implement a location process to face image presenting in the image which is collected by the image collection module; the robot can implement a real-time adjustment for framing scope or angle of the image collection module through a motor, the image collection module detects people crossing within visual scope of it, the image collection module can implement real-time tracking snapshot by the motor;

(c) using the face detection module to implement a preprocessing for the face image after being located, then comparing with an image feature information of a known identity contained in a database, to determine an identity information and a confidence rate of the present face image;

the database comprises a local data memory module and a web server data memory module;

the local data memory module adopts face recognition technology according to feature matching, the local data memory module makes the feature database of face image of a known identity, secondly it extracts a same type of feature according to the face image of real-time collection, comparing feature distance of present face to the feature distance of the database face through a math distance function, finally, it determines possible identity, and gives out the confidence rate.

9. The image recognition method as claimed in Claim 8, wherein in the step (c), if the identity information of the present face image is incompatible with the image feature information of a known identity in a database, execute the step (a) to step (c) continually.