

CLAIMS

1. A method for dynamically adding facial images into a database, comprising:

comparing an obtained first facial image with pre-stored facial image information in an image database; and

in response to a comparison result indicating that the first facial image is not matched with any one piece of the pre-stored facial image information in the image database, determining whether to store at least one of the first facial image or feature information of the first facial image into the image database,

wherein the image database comprises at least one piece of pre-stored facial image information and a number of occurrences corresponding to each piece of the pre-stored facial image information;

and the method further comprises:

in response to the comparison result indicating that the first facial image is matched with a piece of pre-stored facial image information in the image database, adding a number of occurrences corresponding to the pre-stored facial image information matching the first facial image in the image database by 1.

2. The method according to claim 1, wherein the determining whether to store the first facial image into the image database comprises:

determining, according to a preset mode, whether to store at least one of the first facial image or the feature information of the first facial image into the image database.

3. The method according to claim 1, wherein the determining whether to store at least one of the first facial image or the feature information of the first facial image into the image database comprises:

determining, according to obtained operation instruction information, whether to store at least one of the first facial image or the feature information of the first facial image into the image database.

4. The method according to claim 3, wherein before the determining, according to obtained operation instruction information, whether to store at least one of the first facial image and the feature information of the first facial image into the image database, the method further comprises:

 sending prompt operation information; and

 receiving the operation instruction information which is fed back according to the prompt operation information.

5. The method according to claim 4, further comprising:

 in response to not receiving, within a preset time period, the operation instruction information which is fed back according to the prompt operation information, sending the prompt operation information repeatedly, or determining not to store at least one of the first facial image and the feature information of the first facial image in the image database.

6. The method according to claim 1, wherein the image database comprises at least one image group, and the image group stores at least one second facial image of a same person and acquisition time and an acquisition location corresponding to each of the at least one second facial image;

 and the method further comprises: in response to a number of occurrences corresponding to the pre-stored facial image information being greater than 2, establishing a behavior trajectory of a person corresponding to the pre-stored facial image information based on at least one second facial image in an image group, to which the pre-stored facial image information belongs, as well as acquisition time and an acquisition location of each of the at least one second facial image.

7. The method according to any one of claims 1 to 6, wherein the image database comprises at least one image group, and the image group is configured to store a plurality of second facial images of a same person;

and the comparing an obtained first facial image with pre-stored facial image information in an image database comprises: comparing the obtained first facial image with one of the plurality of second facial images in an image group.

8. The method according to any one of claims 1 to 7, wherein before the comparing an obtained first facial image with pre-stored facial image information in an image database, the method further comprises:

performing a duplicate removing and filtering operation on a plurality of obtained facial images to obtain at least one facial image, the at least one facial image comprising the first facial image; or

receiving at least one facial image sent by a terminal device, wherein the at least one facial image is obtained by performing the duplicate removing and filtering operation on the plurality of obtained facial images by the terminal device, and the at least one facial image comprises the first facial image.

9. The method according to claim 8, wherein the performing a duplicate removing and filtering operation on a plurality of obtained facial images to obtain at least one facial image comprises:

matching a third facial image in the plurality of facial images with at least one facial image in an image queue to obtain a matching result; and

in response to the matching result indicating that the third facial image is matched with an image in the image queue, performing at least one of following operations: determining that the third facial image is a duplicate image, or not storing the third facial image into the image queue.

10. The method according to claim 9, further comprising:

in response to the matching result indicating that the third facial image is not matched with any one image in the image queue, performing at least one of following operations: determining that the third facial image is not a duplicate image, or adding the third facial image into the image queue.

11. The method according to claim 9 or 10, wherein the matching a third facial image in the plurality of facial images with at least one facial image in an image queue to obtain a matching result comprises:

obtaining, based on facial features corresponding to the third facial image and facial features corresponding to each of the at least one facial image in the image queue, a similarity between the third facial image and the each of the at least one facial image in the image queue; and

obtaining, based on the similarity between the third facial image and each facial image in the image queue, a matching result.

12. The method according to any one of claims 8 to 11, wherein before the performing a duplicate removing and filtering operation on a plurality of obtained facial images to obtain at least one facial image, the method further comprises:

performing a quality-based filtering operation on a plurality of obtained fourth facial images to obtain a plurality of facial images with image quality meeting a first preset condition.

13. The method according to claim 12, wherein the performing a quality-based filtering operation on a plurality of obtained fourth facial images comprises at least one of following operations:

filtering, based on a facial attribute corresponding to each fourth facial image, the plurality of obtained fourth facial images, the facial attribute indicating display quality of a face in the each fourth facial image;

or,

filtering, based on a facial angle in the fourth facial image, the plurality of obtained fourth facial images, the facial angle indicating a deflection angle of the face in the fourth facial image.

14. The method according to claim 13, wherein the facial attribute comprises at least one of the following: the facial angle, a facial width and height value, or a facial blurring degree;

and the filtering, based on a facial attribute corresponding to the fourth facial image, the plurality of obtained fourth facial images comprises:

in response to a first condition being satisfied, determining that the image quality of the fourth facial image reaches the first preset condition, wherein the first condition comprises at least one of the following: the facial angle is within a first preset range, the facial width-height value is greater than a second preset threshold, or the facial blurring degree is less than a third preset threshold.

15. The method according to any one of claims 12 to 14, wherein the performing a quality-based filtering operation on a plurality of obtained fourth facial images to obtain a plurality of facial images with image quality meeting a first preset condition comprises:

recognizing at least one fourth facial image corresponding to a same person from the plurality of fourth facial images; and

filtering the at least one fourth facial image corresponding to the same person to obtain, from the at least one fourth facial images, facial images with the quality meeting the first preset condition.

16. The method according to claim 15, wherein the filtering the at least one fourth facial image corresponding to the same person to obtain facial images in the at least one fourth facial image with the quality reaching the first preset condition comprises:

filtering the at least one fourth facial image corresponding to the same person to obtain one facial image in the at least one fourth facial image with the quality reaching the first preset condition;

wherein the performing a duplicate removing and filtering operation on a plurality of obtained facial images to obtain at least one facial image comprises:

performing a duplicate removing and filtering operation on the plurality of obtained facial images corresponding to different persons to obtain at least one facial image.

17. The method according to claim 15 or 16, wherein the facial angle comprises at least one of the following: a facial yaw angle, a facial pitch angle, or a facial roll angle;

and the filtering the at least one fourth facial image corresponding to the same person to obtain, from the at least one fourth facial images, facial images with the quality meeting the first preset condition comprises:

converting the facial yaw angle, the facial pitch angle, and the facial roll angle corresponding to each fourth facial images into a three-dimensional vector; and

filtering, based on the distance between the three-dimensional vector and a source point, the at least one fourth facial image to obtain, from the at least one fourth facial image, the facial image with the quality meeting the first preset condition, wherein the source point is a three-dimensional vector with all values equal to 0.

18. An electronic device, comprising:

a memory, configured to store executable instructions; and

a processor, configured to communicate with the memory to execute the executable instructions to perform:

comparing an obtained first facial image with pre-stored facial image information in an image database; and

in response to a comparison result indicating that the first facial image has no matched pre-stored facial image information in the image database, determining whether to store at least one of the first facial image or feature information of the first facial image into the image database,

wherein the image database comprises at least one piece of pre-stored facial image information and a number of occurrences corresponding to each piece of the pre-stored facial image information;

and the processor is further configured to perform:

in response to the comparison result indicating that the first facial image is matched with a piece of pre-stored facial image information in the image database, adding a number of occurrences corresponding to the pre-stored facial image information matching the first facial image in the image database by 1.

19. A computer storage medium, configured to store computer-readable instructions, wherein in response to the instructions being executed, the operations of the method for dynamically adding facial images into a database according to any one of claims 1 to 17 are executed.