CLAIMS

1. A method for face image deduplication, comprising:

filtering a plurality of obtained first face images to obtain at least one second face image with image quality reaching a first preset condition;

matching the second face image with at least one third face image in an image queue to obtain a matching result; and

determining, according to the matching result, whether to perform deduplication operation on the second face image,

wherein the filtering the plurality of obtained first face images to obtain at least one second face image with image quality reaching a first preset condition comprises:

identifying, from the plurality of first face images, at least one first face image corresponding to a same person;

converting a face yaw angle, a face pitch angle, and a face roll angle corresponding to the first face image into a three-dimensional vector; and

filtering the at least one first face image corresponding to the same person based on a distance from the three-dimensional vector to a source point to obtain the second face image with the quality reaching the first preset condition, wherein the source point is a three-dimensional vector with all values equal to 0.

2. The method according to claim 1, wherein the image queue comprises at least one third face image, each of which corresponds to a different person.

3. The method according to claim 1 or 2, wherein the filtering the plurality of obtained first face images comprises:

filtering the plurality of obtained first face images based on a face attribute

corresponding to each first face image, wherein the face attribute corresponding to each first face image is used for indicating display quality of a face in the each first face image;

and/or,

filtering the plurality of obtained first face images based on a face angle in the first face images, wherein the face angle in the first face images is used for indicating a deflection angle of a face in the first face images.

4. The method according to claim 3, wherein the face attribute comprises one or more of: the face angle, a face width and height value, and a face blurring degree; and

the filtering the plurality of obtained first face images based on a face attribute corresponding to the first face images comprises:

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

5. The method according to claim 1, wherein the identifying, from the plurality of first face images, at least one first face image corresponding to the same person comprises:

identifying, from the plurality of first face images, at least one first face image corresponding to the same person within a first set duration; and

the filtering the at least one first face image corresponding to the same person based on a distance from the three-dimensional vector to a source point to obtain the second face image with the quality reaching the first preset condition comprises:

determining a first face image in the at least one first face image, of which three-dimensional vector has a smallest distance with the source point, as the second face image.

6. The method according to any one of claims 1 to 5, wherein the matching the second face image with at least one third face image in an image queue to obtain a matching result comprises:

obtaining a similarity between the second face image and the at least one third face image in the image queue based on a second face feature corresponding to the second face image and a third face feature corresponding to each of the at least one third face image in the image queue; and

obtaining the matching result based on the similarity between the second face image and the at least one third face image in the image queue.

7. The method according to claim 6, wherein the obtaining the matching result based on the similarity between the second face image and the at least one third face image in the image queue comprises:

in response to that a third face image having a similarity to the second face image greater than or equal to a preset similarity exists in the image queue, obtaining a matching result indicating that the second face image has a matched image in the image queue; and/or

in response to that a third face image having a similarity to the second face image greater than or equal to the preset similarity does not exist in the image queue, obtaining a matching result indicating that the second face image has no matched image in the image queue.

8. The method according to any one of claims 1 to 7, wherein the determining, according to the matching result, whether to perform deduplication operation on the second face image comprises:

in response to the matching result indicating that the second face image has a matched image in the image queue, determining that the second face image is a

duplicate image, and/or, not storing the second face image in the image queue.

9. The method according to any one of claims 1 to 8, wherein the determining, according to the matching result, whether to perform deduplication operation on the second face image comprises:

in response to the matching result indicating that the second face image has no matched image in the image queue, determining that the second face image is not a duplicate image, and/or, storing the second face image in the image queue.

10. The method according to any one of claims 1 to 9, wherein before the filtering the plurality of obtained first face images, the method further comprises:

obtaining the plurality of first face images based on at least one frame of video images.

11. The method according to claim 10, wherein the obtaining the plurality of first face images based on at least one frame of video images comprises:

acquiring, from a video stream, at least one frame of video image comprising a face image; and

performing face recognition on the at least one frame of video image to obtain the plurality of first face images.

12. The method according to claim 10 or 11, further comprising:

establishing at least one face trajectory based on the plurality of obtained first face images, wherein each face trajectory corresponds to a person; and

the filtering the plurality of obtained first face images to obtain at least one second face image with image quality reaching a first preset condition comprising:

filtering at least one first face image comprised in each of the at least one face trajectory, so as to obtain a second face image in the each face trajectory with the

image quality reaching the first preset condition.

13. The method according to any one of claims 1 to 12, wherein the method is applied to a client device; and

the method further comprises:

sending a target face image or a target image queue obtained after the deduplication operation to a server.

14. An apparatus for face image deduplication, comprising:

a filtering unit, configured to filter a plurality of obtained first face images to obtain at least one second face image with image quality reaching a first preset condition;

a matching unit, configured to match the second face image with at least one third face image in an image queue to obtain a matching result; and

a deduplication unit, configured to determine, according to the matching result, whether to perform deduplication operation on the second face image,

wherein the filtering unit is configured to identify, from the plurality of first face images, at least one first face image corresponding to a same person; and

the filtering unit further comprises:

an angle conversion module, configured to convert a face yaw angle, a face pitch angle, and a face roll angle corresponding to the first face image into a three-dimensional vector; and

a vector-based filtering module, configured to filter the at least one first face image corresponding to the same person based on a distance from the three-dimensional vector to a source point to obtain the second face image with the quality reaching the first preset condition, wherein the source point is a three-dimensional vector with all values equal to 0.

15. An electronic device, comprising:

a memory, configured to store an executable instruction; and

a processor, configured to communicate with the memory to execute the executable instruction so as to implement a method for face image deduplication, the method comprising:

filtering a plurality of obtained first face images to obtain at least one second face image with image quality reaching a first preset condition;

matching the second face image with at least one third face image in an image queue to obtain a matching result; and

determining, according to the matching result, whether to perform deduplication operation on the second face image,

wherein the filtering the plurality of obtained first face images to obtain at least one second face image with image quality reaching a first preset condition comprises:

identifying, from the plurality of first face images, at least one first face image corresponding to a same person;

converting the face yaw angle, the face pitch angle, and the face roll angle corresponding to the first face image into a three-dimensional vector; and

filtering the at least one first face image corresponding to the same person based on a distance from the three-dimensional vector to a source point to obtain the second face image with the quality reaching the first preset condition, wherein the source point is a three-dimensional vector with all values equal to 0.

16. A computer storage medium, configured to store computer readable instructions, wherein execution of the instructions cause the method for face image deduplication according to any one of claims 1 to 13 to be implemented.

17. A computer program, comprising a computer readable code, wherein running of

the computer readable code on a device cause a processor in the device to execute instructions for implementing the method for face image deduplication according to any one of claims 1 to 13.