CLAIMS

1. An image acquisition method, comprising:

acquiring an initial face image of a user by a first image acquisition apparatus;

determining an acquisition parameter based on the initial face image of the user, wherein the acquisition parameter comprises an acquisition angle and an acquisition height for a second image acquisition apparatus, and determining the acquisition parameter comprises:

determining eye region spatial location information of the user based on the initial face image of the user; and

determining the acquisition parameter based on the eye region spatial location information of the user, wherein the eye region spatial location information of the user comprises location information of two pupil centers of the user;

sending the acquisition parameter to a gimbal;

controlling, by the gimbal, the ~~a~~ second image acquisition apparatus to acquire an eye print image of the user according to ~~a target~~ the acquisition parameter~~, the target acquisition parameter being determined based on the initial face image~~; and

synthesizing the initial face image and the eye print image into a target face image of the user for face recognition.

~~2. The method of claim 1, wherein the controlling a second image acquisition apparatus to acquire an eye print image of the user according to a target acquisition parameter comprises:~~

~~determining a target acquisition parameter of the second image acquisition apparatus based on the initial face image; and~~

~~controlling the second image acquisition apparatus to acquire the eye print image of the user based on the target acquisition parameter.~~

~~3. The method of claim 2, wherein the determining a target acquisition parameter of the second image acquisition apparatus based on the initial face image comprises:~~

~~determining eye space location information of the user based on the initial face image of the user; and~~

~~determining the target acquisition parameter of the second image acquisition apparatus based on the eye space location information of the user.~~

~~4~~2. The method of claim 1, wherein the controlling ~~the~~a second image acquisition apparatus to acquire an eye print image of the user according to ~~a target~~ the acquisition parameter comprises:

controlling the second image acquisition apparatus to acquire an eye region image of the user according to the ~~target~~ acquisition parameter; and

segmenting the eye region image of the user by a full convolutional depth neural network to acquire an eye print image of which the sharpness meets a preset condition.

~~5~~3. The method of claim 1, wherein

a Field of View (FoV) of the first image acquisition apparatus is greater than that of the second image acquisition apparatus.

~~6~~4. The method of claim ~~5~~1, wherein

~~the FoV~~ a Field of View (FoV) of the first image acquisition apparatus is greater than or equal to 45°*100°; and

~~the~~ an FoV of the second image acquisition apparatus is greater than or equal to 50 mm*140 mm.

~~7. The method of claim 1 or 4, wherein the controlling a second image acquisition apparatus to acquire an eye print image of the user according to a target acquisition parameter comprises:~~

~~controlling the second image acquisition apparatus by using a steering gimbal to acquire the eye print image of the user according to the target acquisition parameter.~~

~~8~~5. The method of claim 1, wherein

a lens of the second image acquisition apparatus is an optical zoom lens or a prime lens.

~~9~~6. The method of claim 1~~any of claims 1 to 8~~, wherein a Depth of Field (DoF) of the second image acquisition apparatus is greater than or equal to 2 cm.

~~10. The method of claim 3, wherein the eye space location information of the user comprises pupil center location information of two eyes of the user.~~

~~11. An image acquisition apparatus, comprising:~~

~~a first acquisition unit configured to acquire an initial face image of a user by a first image acquisition apparatus;~~

~~a second acquisition unit configured to control a second image acquisition apparatus to acquire an eye print image of the user according to a target acquisition parameter, the target acquisition parameter being determined based on the initial face image; and~~

~~a synthesis unit configured to synthesize the initial face image and the eye print image into a target face image of the user.~~

~~12. An image acquisition system, comprising a first image acquisition apparatus, a second image acquisition apparatus, a control apparatus, and a synthesis apparatus, wherein~~

~~the first image acquisition apparatus is configured to acquire an initial face image of a user;~~

~~the second image acquisition apparatus is configured to acquire an eye print image of the user;~~

~~the control apparatus is configured to control the second image acquisition apparatus to acquire the eye print image of the user according to a target acquisition parameter; and~~

~~the synthesis apparatus is configured to synthesize the initial face image and the eye print image into a target face image of the user.~~

~~13~~7. An electronic device, comprising:

a processor; and

a memory configured to store a computer executable instruction, wherein when executed, the executable instruction causes the processor to perform the following operations:

acquiring an initial face image of a user by a first image acquisition apparatus;

determining an acquisition parameter based on the initial face image of the user, wherein the acquisition parameter comprises an acquisition angle and an acquisition height for a second image acquisition apparatus, and determining the acquisition parameter comprises:

determining eye region spatial location information of the user based on the initial face image of the user; and

determining the acquisition parameter based on the eye region spatial location information of the user, wherein the eye region spatial location information of the user comprises location information of two pupil centers of the user;

sending the acquisition parameter to a gimbal;

controlling, by the gimbal, the ~~a~~ second image acquisition apparatus to acquire an eye print image of the user according to ~~a~~ the ~~target~~ acquisition parameter~~, the target acquisition parameter being determined based on the initial face image~~; and

synthesizing the initial face image and the eye print image into a target face image of the user for face recognition.

~~14~~8. A computer readable storage medium, wherein one or more programs are stored in the computer readable storage medium, and when executed by an electronic device that comprises a plurality of applications, the one or more programs cause the electronic device to perform the following operations:

acquiring an initial face image of a user by a first image acquisition apparatus;

determining an acquisition parameter based on the initial face image of the user, wherein the acquisition parameter comprises an acquisition angle and an acquisition height for a second image acquisition apparatus, and determining the acquisition parameter comprises:

determining eye region spatial location information of the user based on the initial face image of the user; and

determining the acquisition parameter based on the eye region spatial location information of the user, wherein the eye region spatial location information of the user comprises location information of two pupil centers of the user;

sending the acquisition parameter to a gimbal;

controlling, by the gimbal, the ~~a~~ second image acquisition apparatus to acquire an eye print image of the user according to ~~a target~~ the acquisition parameter~~, the target acquisition parameter being determined based on the initial face image~~; and

synthesizing the initial face image and the eye print image into a target face image of the user for face recognition.