

[0006a] In one aspect, provided herein is a method comprising: capturing a first face image of a subject using light in a visible wavelength range; capturing a second face image of the subject using light in a near infrared wavelength range; retrieving a selfie face image of a subject, wherein the selfie face image was previously captured using an imaging device that is different from an imager capturing the first face image and the second face image; matching, by a biometric algorithm, a face portion of the first face image against a face portion of the selfie face image, wherein the face portion for each at least comprises an iris portion; determining a successful match by the biometric algorithm, the successful match indicating that the subject in the first face image is the same subject as the subject in the selfie face image; responsive to determining the successful match, segmenting one or more iris portions from the second face image to generate one or more iris images, each iris image corresponding to an iris portion; and storing in a database an association between (i) the one or more iris images and the (ii) selfie face image, the association indicating that the subject in the one or more iris images is the same subject as the subject in the selfie face image.

[0006b] In one aspect, provided herein is a system comprising: an imager configured to capture a first face image of a subject using light in a visible wavelength range and to capture a second face image of the subject using light in a near infrared wavelength range; and a processor configured to execute computer-executable instructions for performing a method comprising: retrieving a selfie face image of a subject, wherein the selfie face image was previously captured using an imaging device that is different from the imager; matching, by a biometric algorithm, a face portion of the first face image against a face portion of the selfie face image, wherein the face portion for each at least comprises an iris portion; determining a successful match by the biometric algorithm, the successful match indicating that the subject in the first face image is the

same subject as the subject in the selfie face image; responsive to determining the successful match, segmenting one or more iris portions from the second face image to generate one or more iris images, each iris image corresponding to an iris portion; and storing in a database an association between (i) the one or more iris images to the (ii) selfie face image, the association indicating that the subject in the one or more iris images is the same subject as the subject in the selfie face image.

What is claimed is:

1. A method comprising:

capturing a first face image of a subject using light in a visible wavelength range; capturing a second face image of the subject using light in a near infrared wavelength range;

retrieving a selfie face image of a subject, wherein the selfie face image was previously captured using an imaging device that is different from an imager capturing the first face image and the second face image;

matching, by a biometric algorithm, a face portion of the first face image against a face portion of the selfie face image, wherein the face portion for each at least comprises an iris portion;

determining a successful match by the biometric algorithm, the successful match indicating that the subject in the first face image is the same subject as the subject in the selfie face image;

responsive to determining the successful match, segmenting one or more iris portions from the second face image to generate one or more iris images, each iris image corresponding to an iris portion; and

storing in a database an association between (i) the one or more iris images and the (ii) selfie face image, the association indicating that the subject in the one or more iris images is the same subject as the subject in the selfie face image.

2. The method of claim 1, wherein the first face image and the second face image are simultaneously captured by the imager.

3. The method of claim 1, wherein the imager is a face imager.

4. The method of claim 1, wherein the imager is an iris imager.

5. The method of claim 1, further comprising:

matching, by a cross-wavelength matching biometric algorithm, the face portion of the first face image against a face portion of the second face image; and

determining a second successful match, the successful match indicating that the subject in the first face image is the same subject as the subject in the second face image,

wherein segmenting the one or more iris portions from the second image is performed responsive to determining the successful match and determining the second successful match.

6. The method of claim 1, further comprising associating the second face image to the selfie face image for biometric identity.

7. The method of claim 1, further comprising associating the one or more iris images to the selfie face image to making a payment.

8. The method of claim 1, further comprising associating the one or more iris images to the selfie face image to match against databases to confirm a traveler's identity.
9. The method of claim 1, further comprising associating the one or more iris images to the selfie face image to access to secure buildings and other physical spaces.
10. The method of claim 1, further comprising storing in the database an association between the first image and the selfie image.
11. The method of claim 1, further comprising storing in the database an association between the selfie image and biographic data.
12. A system comprising:
- an imager configured to capture a first face image of a subject using light in a visible wavelength range and to capture a second face image of the subject using light in a near infrared wavelength range; and
- a processor configured to execute computer-executable instructions for performing a method comprising:
- retrieving a selfie face image of a subject, wherein the selfie face image was previously captured using an imaging device that is different from the imager;
 - matching, by a biometric algorithm, a face portion of the first face image against a face portion of the selfie face image, wherein the face portion for each at least comprises an iris portion;
 - determining a successful match by the biometric algorithm, the successful match indicating that the subject in the first face image is the same subject as the subject in the selfie face image;
 - responsive to determining the successful match, segmenting one or more iris portions from the second face image to generate one or more iris images, each iris image corresponding to an iris portion; and
 - storing in a database an association between (i) the one or more iris images to the (ii) selfie face image, the association indicating that the subject in the one or more iris images is the same subject as the subject in the selfie face image.
13. The system of claim 12, wherein the first face image and the second face image are simultaneously captured by the imager.
14. The system of claim 12, wherein the imager is a face imager.
15. The system of claim 12, wherein the imager is an iris imager.
16. The system of claim 12, further comprising:

matching, by a cross-wavelength matching biometric algorithm, the face portion of the first image against a face portion of the second face image; and

determining a second successful match, the successful match indicating that the subject in the first face image is the same subject as the subject in the second face image,

wherein segmenting the one or more iris portions from the second image is performed responsive to determining the successful match and determining the second successful match.

17. The system of claim 12, further comprising associating the second face image to the selfie face image for biometric identity.

18. The system of claim 12, further comprising associating the one or more iris images to the selfie face image to making a payment.

19. The system of claim 12, further comprising associating the one or more iris images to the selfie face image to match against databases to confirm a traveler's identity.

20. The system of claim 12, further comprising associating the one or more iris images to the selfie face image to access to secure buildings and other physical spaces.