CLAIMS:

1. A wearable visualization system, comprising:

a wearable visualization device, comprising: a housing; a display coupled to the housing and configured to display an image for a user; and a camera coupled to the housing and configured to capture the image; and a computer system configured to: receive the image from the camera; determine an orientation of the wearable visualization device relative to a gravity vector; determine a master image that corresponds to the orientation of the wearable visualization device; and compare the image to the master image to determine if the image matches the master image.

2. The wearable visualization system of claim 1, wherein the computer system is configured to control the display in response to the comparison between the image and the master image.

3. The wearable visualization system of claim 1, wherein the camera is oriented toward the display.

4. The wearable visualization system of claim 1, wherein the camera is oriented in a direction away from the display, and the camera is configured to capture the image on an eye of the user.

5. The wearable visualization system of claim 4, wherein the computer system is configured to process the image to remove distorting effects of eye curvature and eye image.

6. The wearable visualization system of claim 1, wherein the wearable visualization device comprises one or more sensors.

7. The wearable visualization system of claim 6, wherein the wearable visualization device is configured to use feedback from the one or more sensors to determine the orientation of the wearable visualization device.

8. The wearable visualization system of claim 1, wherein the image is a test image comprising one or more patterns.

9. A method of calibrating a wearable visualization system, the method comprising:

detecting, with a computer system, an orientation of a wearable visualization device;

capturing, with a camera, an image produced on a display of the wearable visualization device;

determining, with the computer system, a master image in response to the orientation of the wearable visualization device; and

comparing, with the computer system, the image to the master image to determine that the image matches the master image.

10. The method of claim 9, comprising determining, with the computer system, a location of the wearable visualization device.

11. The method of claim 10, comprising determining, with the computer system, the master image using the location of the wearable visualization device.

12. The method of claim 9, comprising controlling, with the computer system, the display in response to comparing, with the computer system, the image to the master image.

13. The method of claim 9, wherein capturing, with the camera, the image produced by the display comprises capturing, with the camera, the image directly from the display.

14. The method of claim 9, wherein capturing, with the camera, the image produced by the display comprises capturing, with the camera, the image from an eye of a user.

15. The method of claim 14, comprising processing, with the computer system, the image to remove distorting effects of eye curvature and eye image.

16. A method of calibrating a wearable visualization system, the method comprising:

detecting, with a computer system, an operation of a wearable visualization device during an amusement park ride;

capturing, in response to detecting the operation of the wearable visualization device and with a camera, a test image produced on a display of the wearable visualization device during the amusement park ride; and

comparing, with the computer system, the test image captured by the camera to a master image to determine that the test image matches the master image by determining that: a color difference between the test image and the master image is within a threshold color difference;

a brightness difference between the test image and the master image is within a threshold brightness difference; a number of dead pixels in the test image relative to the master image is within a threshold number of dead pixels; a blurriness of the test image relative to the master image is within a threshold blurriness difference; or a combination thereof.

17. The method of claim 16, comprising generating, with the computer system, a ready signal in response to determining, with the computer system, that the test image matches the master image, wherein the ready signal is accessible to a ride operator of the amusement park ride.

18. The wearable visualization system of claim 1, wherein the computer system is configured to: receive an indication of a location of the wearable visualization device along a ride path in an amusement park ride; and determine the master image that corresponds to the orientation of the wearable visualization device and the location of the wearable visualization device.

19. The method of claim 16, wherein detecting, with the computer system, the operation of the wearable visualization device comprises determining that the wearable visualization device is stored in a storage location, and the method comprises: instructing, with the computer system, the display of the wearable visualization device to produce the test image in response to detecting that the wearable visualization device is stored in the storage location.

20. The method of claim 16, wherein the test image includes an image overlaid on an environment of the amusement park ride.