CLAIMS

1. An image processing method, comprising:

acquiring scene images corresponding to a game area at different viewpoints during a gaming stage to obtain a plurality of groups of scene images; wherein each group of scene images in the plurality of groups of scene images comprises at least one frame of scene image corresponding to the game area at a same viewpoint;

performing object analysis on the plurality of groups of scene images to obtain object analysis data corresponding to the game area; and

writing the object analysis data into an object general-purpose data structure, wherein the object general-purpose data structure is provided with positions for supporting storage of various types of data related to the object analysis data;

wherein performing object analysis on the plurality of groups of scene images to obtain object analysis data corresponding to the game area comprises:

invoking a main thread to perform object detection on the plurality of groups of scene images, and to perform association between an object and a human body to obtain first association data;

invoking a parallel thread to perform a first object analysis processing on the plurality of groups of scene images to obtain first processing data, and invoking the main thread at a same time to perform a second object analysis processing on the plurality of groups of scene images to obtain second processing data, wherein the first object analysis processing and the second object analysis processing are not associated in time sequence;

invoking the main thread to associate an object with a face for the plurality of groups of scene images according to the first association data, the first processing data, and the second processing data to obtain second association data; and

determining the first association data, the second association data, the first processing data,

and the second processing data as the object analysis data;

wherein writing the object analysis data into the object general-purpose data structure comprises:

writing analysis data of a same object into one object general-purpose object data structure.

2. The method of claim 1, wherein the first object analysis processing comprises: object tracking, determining object state, adaptation processing, and information fusion.

3. The method of claim 2, wherein before invoking the parallel thread to perform the first object analysis processing on the plurality of groups of scene images to obtain the first processing data, the method further comprises:

acquiring standard images corresponding to the game area at different viewpoints during a game preparation stage to obtain a plurality of frames of standard images, wherein each frame of standard image in the plurality of frames of standard images is a desktop image corresponding to the game area at a viewpoint;

acquiring an image collection parameter corresponding to each frame of standard image in the plurality of frames of standard images;

correspondingly, invoking the parallel thread to perform the first object analysis processing on the plurality of groups of scene images to obtain the first processing data comprises:

invoking the parallel thread to perform an adaptation processing on each group of scene images in the plurality of groups of scene images by using standard images at a same viewpoint in the plurality of frames of standard images and the image collection parameters corresponding to the standard images at the same viewpoint to obtain a corresponding adaptation result,

wherein the first processing data comprises the adaptation result of each group of scene images in the plurality of groups of scene images.

4. The method of claim 1, wherein the second object analysis processing comprises: object recognition, human hand recognition, and face recognition.

5. The method of claim 1, wherein writing the object analysis data into the object general-purpose data structure comprises:

performing data selection and/or data integration on the object analysis data to obtain target analysis data; and

writing the target analysis data into the object general-purpose data structure.

6. An image processing apparatus, comprising:

an acquisition module, configured to acquire scene images corresponding to a game area at different viewpoints during a gaming stage to obtain a plurality of groups of scene images, wherein each group of scene images in the plurality of groups of scene images comprises at least one frame of scene image corresponding to the game area at a same viewpoint;

an analysis module, configured to perform object analysis on the plurality of groups of scene images to obtain object analysis data corresponding to the game area; and

a writing module, configured to write the object analysis data into an object general-purpose data structure, wherein the object general-purpose data structure is provided with positions for supporting storage of various types of data related to the object analysis data;

wherein the analysis module is specifically configured to:

invoke a main thread to perform object detection on the plurality of groups of scene images, and to peform association between an object and a human body to obtain first association data;

invoke a parallel thread to perform a first object analysis processing on the plurality of groups of scene images to obtain first processing data, and invoke the main thread at a same time to perform a second object analysis processing on the plurality of groups of scene images to obtain second processing data, wherein the first object analysis processing and the second object analysis processing are not related in time sequence;

invoke the main thread to associate an object with a face for the plurality of groups of scene images according to the first association data, the first processing data, and the second processing data to obtain second association data; and

determine the first association data, the second association data, the first processing data, and the second processing data as the object analysis data; and

wherein the writing module is specifically configured to write analysis data of a same object into one object general-purpose object data structure.

7. The apparatus of claim 6, wherein the first object analysis processing comprises: object tracking, determining object state, adaptation processing, and information fusion.

8. The apparatus of claim 7, wherein the analysis module is specifically configured to: before invoking the parallel thread to perform the first object analysis processing on the plurality of groups of scene images to obtain the first processing data, the method further comprises:

acquire standard images corresponding to the game area at different viewpoints during a game preparation stage to obtain a plurality of frames of standard images, wherein each frame of standard image in the plurality of frames of standard images is a desktop image corresponding to the game area at a viewpoint;

acquire an image collection parameter corresponding to each frame of standard image in the plurality of frames of standard images;

correspondingly, the analysis module is specifically configured to:

invoke the parallel thread to perform an adaptation processing on each group of scene images in the plurality of groups of scene images by using standard images at a same viewpoint in the plurality of frames of standard images and the image collection parameters corresponding to the standard images at the same viewpoint to obtain a corresponding adaptation result,

wherein the first processing data comprises the adaptation result of each group of scene images in the plurality of groups of scene images.

9. The apparatus of claim 7, wherein the second object analysis processing comprises: object recognition, human hand recognition, and face recognition.

10. The apparatus of claim 6, wherein the writing module is configured to:

perform data selection and/or data integration on the object analysis data to obtain target analysis data; and

write the target analysis data into the object general-purpose data structure.

11. An electronic device, comprising: a processor, a memory, and a communication bus; wherein

the communication bus is configured to implement connection and communication between the processor and the memory; and

the processor is configured to execute one or more programs stored in the memory to implement the image processing method according to any one of claims 1-5.

12. A computer-readable storage medium having stored thereon one or more programs that when executed by one or more processors to implement the image processing method according to any one of claims 1-5.