CLAIMS

1. A residence time determination method, comprising:

acquiring a player image that is collected by an image collection apparatus and comprises a specified part of a game player, wherein the image collection apparatus is deployed in a game area;

determining identification information of the game player on the basis of feature information of the specified part in the player image; and

determining residence time of the game player in the game area on the basis of the identification information of the game player and existence time of the feature information of the game player in the player image,

wherein the method further comprises:

acquiring storage duration of the identification information of the game player in a buffer storage space corresponding to the game area in a case where the identification information of the game player is stored in the buffer storage space; and

determining the existence time by analyzing the validity of the feature information of the specified in the player image in a case where the storage duration is greater than a first threshold value.

2. The method of claim 1, wherein determining the identification information of the game player on the basis of feature information of the specified part in the player image comprises:

acquiring an identification information set comprising the identification information of at least one game player, wherein the identification information set comprises the feature information of the specified part of the at least one game player, and the identification information corresponding to the feature information of the specified part of the at least one game player; and

determining the identification information on the basis of the identification information set and the feature information of the specified part.

3. The method of claim 2, wherein acquiring an identification information set comprising the identification information of at least one game player comprises:

acquiring the identification information set from an edge computing device when the

edge computing device stores the identification information set; and/or

acquiring the identification information set from a cloud device when the edge computing device does not store the identification information set.

4. The method of claim 1, wherein determining the residence time of the game player in the game area on the basis of the identification information of the game player and the existence time of the feature information of the game player comprises:

determining the residence time of the game player, corresponding to the identification information, in the game area on the basis of the existence time in a case where the identification information of the game player is stored in ~~a~~ the buffer storage space corresponding to the game area.

5. The method of claim 4, further comprising:

analyzing the player image, and storing the identification information of the game player in the buffer storage space corresponding to the game area in a case where it is determined that the game player executes a specified operation.

~~6. The method of claim 4, further comprising:~~

~~acquiring storage duration of the identification information of the game player in the buffer storage space in the case where the identification information of the game player is stored in the buffer storage space; and~~

~~determining the existence time by analyzing the validity of the feature information of the specified in the player image in a case where the storage duration is greater than a first threshold value.~~

~~7~~6. The method of claim ~~6~~1, further comprising:

sending at least one of the identification information of the game player, the feature information of the game player, or the current position information of the game player to a management device of the game place in a case where the storage duration is greater than a second threshold value.

~~8~~7. The method of claim 1, wherein determining the residence time of the game player in the game area comprises:

determining the residence time of the game player in the game area on the basis of the identification information of the game player and the existence time of the feature information of the game player in the player image in a case where a duration in which the image player does not carry the feature information of the game player is greater than a third threshold value.

~~9~~8. The method of claim 1, further comprising:

analyzing the player image to determine an associated part in the player image, wherein the associated part comprises at least one other part, associated with the specified part, of the game player; and

analyzing the feature information of the associated part in the player image to determine the existence time.

~~10~~9. The method of claim ~~9~~8, wherein analyzing the feature information of the associated part in the player image to determine the existence time comprises:

analyzing the feature information of the associated part to determine the existence time in a case where the player image does not carry the feature information of the specified part.

~~11~~10. The method of any one of claims 1 to ~~9~~8, further comprising:

sending the residence time of the game player in the game area to the management device of the game place, wherein the game place is provided with at least one the game area.

~~12~~11. The method of claim ~~11~~10, further comprising:

determining a trajectory of the game player in the game place according to the residence time of the game player in each game area and a timestamp of the player image.

~~13~~12. The method of any one of claims 1 to ~~9~~8, wherein the specified part comprises at least one of a face, a hand, or a fingerprint.

~~14~~13. An edge computing device, configured to acquire a player image that is collected by an image collection apparatus and comprises a specified part of a game player, wherein the image collection apparatus is deployed in a game area;

the edge computing device comprises a processor and a memory;

the memory stores a computer executable instruction; and

the processor is configured to execute the computer executable instruction stored in the memory to:

acquire a player image that is collected by an image collection apparatus and comprises a specified part of a game player, wherein the image collection apparatus is deployed in a game area;

determine identification information of the game player on the basis of feature information of the specified part in the player image; and

determine residence time of the game player in the game area on the basis of the identification information of the game player and existence time of the feature information of the game player in the player image.

wherein the processor is further configured to execute the computer executable instruction stored in the memory to:

acquire storage duration of the identification information of the game player in a buffer storage space corresponding to the game area in a case where the identification information of the game player is stored in the buffer storage space; and

determine the existence time by analyzing the validity of the feature information of the specified in the player image in a case where the storage duration is greater than a first threshold value.

~~15~~14. The edge computing device of claim ~~14~~13, wherein when determining the identification information of the game player on the basis of feature information of the specified part in the player image, the processor is configured to:

acquire an identification information set comprising the identification information of at least one game player, wherein the identification information set comprises the feature information of the specified part of the at least one game player, and the identification information corresponding to the feature information of the specified part of the at least one game player; and

determine the identification information on the basis of the identification information set and the feature information of the specified part.

~~16~~15. The edge computing device of claim ~~14~~13, wherein when determining the residence time of the game player in the game area on the basis of the identification information of the game player and the existence time of the feature information of the game player, the processor is configured to:

determine the residence time of the game player, corresponding to the identification information, in the game area on the basis of the existence time in a case where the identification information of the game player is stored in ~~a~~ the buffer storage space corresponding to the game area.

~~17~~16. The edge computing device of claim ~~14~~13, wherein when determining the residence time of the game player in the game area, the processor is configured to:

determine the residence time of the game player in the game area on the basis of the identification information of the game player and the existence time of the feature information of the game player in the player image in a case where a duration in which the image player does not carry the feature information of the game player is greater than a third threshold value.

~~18~~17. The edge computing device of claim ~~14~~13, wherein the processor is further configured to:

analyze the player image to determine an associated part in the player image, wherein the associated part comprises at least one other part, associated with the specified part, of the game player; and

analyze the feature information of the associated part in the player image to determine the existence time.

~~19~~18. A computer storage medium, storing a computer executable instruction, wherein the computer executable instruction is executed to:

acquire a player image that is collected by an image collection apparatus and comprises a specified part of a game player, wherein the image collection apparatus is deployed in a game area;

determine identification information of the game player on the basis of feature information of the specified part in the player image; and

determine residence time of the game player in the game area on the basis of the identification information of the game player and existence time of the feature information of the game player in the player image~~.~~

wherein the computer executable instruction is further executed to:

acquire storage duration of the identification information of the game player in a buffer storage space corresponding to the game area in a case where the identification information of

the game player is stored in the buffer storage space; and

determine the existence time by analyzing the validity of the feature information of the specified in the player image in a case where the storage duration is greater than a first threshold value.

~~20~~19. A computer program, comprising computer executable codes, wherein the computer executable codes are executed to:

acquire a player image that is collected by an image collection apparatus and comprises a specified part of a game player, wherein the image collection apparatus is deployed in a game area;

determine identification information of the game player on the basis of feature information of the specified part in the player image; and

determine residence time of the game player in the game area on the basis of the identification information of the game player and existence time of the feature information of the game player in the player image,

wherein the computer executable codes are further executed to:

acquire storage duration of the identification information of the game player in the buffer storage space in a case where the identification information of the game player is stored in a buffer storage space corresponding to the game area; and

determine the existence time by analyzing the validity of the feature information of the specified in the player image in a case where the storage duration is greater than a first threshold value.