WHAT IS CLAIMED IS:

1. A computer readable storage medium comprising a computer program, the computer program providing a method of identifying a hit location of a dart pin when being executed in one or more control units of a dart game device, the method comprising:

generating first history information in response to a first dart pin throw, wherein the first history information includes hit location information of at least one dart pin hit hitting a dart target shown in a dart target photographing image obtained in response to the first dart pin throw;

obtaining a dart target photographing image in response to a second dart pin throw, wherein the dart target photographing image includes an image of a dart target and a plurality of dart pins hitting the dart target; and

determining, by a dart pin location identification network model, hit location information of a dart pin corresponding to the second dart pin throw from a plurality of hit location information based on the first history information and the dart target photographing image obtained in response to the second dart pin throw.

2. The computer readable storage medium of claim 1, wherein the determining of the hit location information of the dart pin corresponding to the second dart pin throw based on the first history information and the dart target photographing image includes:

generating hit location information of the plurality of dart pins by processing input data based on the dart target photographing image by the dart pin location identification network model; and

determining, based on the first history information, hit location information of the dart pin corresponding to the second dart pin throw among the generated hit location information of the plurality of dart pins.

3. The computer readable storage medium of claim 1, wherein the determining of the hit location information of the dart pin corresponding to the second dart pin throw based on the first history information and the dart target photographing image includes generating hit location information of the dart pin corresponding to the second dart pin throw by processing the input data including the first history information by the dart pin location identification network model

4. The computer readable storage medium of claim 2 or 3, wherein the input data includes a bounding box image corresponding to the dart target photographing image.

5. The computer readable storage medium of claim 2 or 3, wherein the dart target photographing images are generated by at least two cameras positioned in predetermined directions, respectively.

6. The computer readable storage medium of claim 5, wherein the input data includes images of at least two bounding box images disposed in predetermined directions, and the at least two bounding box images correspond to the at least two images generated by at least two cameras positioned in the predetermined directions.

7. The computer readable storage medium of claim 1, wherein the first

history information further includes a score value determined by the first dart pin throw.

8. The computer readable storage medium of claim 1, wherein the hit location information of the dart pin includes at least one of segment location information or bit location information on the segment.

9. The computer readable storage medium of claim 1, further comprising:

generating second history information corresponding to the second dart pin throw.

10. A method of identifying a hit location of a dart pin, performed by a dart game device, the method comprising:

generating first history information in response to a first dart pin throw, wherein the first history information includes hit location information of at least one dart pin hit hitting a dart target shown in a dart target photographing image obtained in response to the first dart pin throw;

obtaining a dart target photographing image in response to a second dart pin throw, wherein the dart target photographing image includes an image of a dart target and a plurality of dart pins hitting the dart target; and

determining, by a dart pin location identification network model, hit location information of a dart pin corresponding to the second dart pin throw from a plurality of hit location information based on the first history information and the dart target photographing image obtained in response to the second dart pin throw.

11. A dart game device, comprising:

a memory including computer-executable components; and

a processor for executing the computer-executable components stored in the memory,

wherein the processor generates first history information in response to a first dart pin throw, wherein the first history information includes hit location information of at least one dart pin hit hitting a dart target shown in a dart target photographing image obtained in response to the first dart pin throw,

obtains a dart target photographing image in response to a second dart pin throw, wherein the dart target photographing image includes an image of a dart target and a plurality of dart pins hitting the dart target, and

determines, by a dart pin location identification network model, hit location information of a dart pin corresponding to the second dart pin throw from a plurality of hit location information based on the first history information and the dart target photographing image obtained in response to the second dart pin throw.