

What is claimed is:

1. A man-machine interaction method, comprising:

collecting, by an interaction end, user request information, the user request information comprising biological sample information;

preprocessing, by the interaction end, the user request information, and sending target request information obtained after preprocessing to a central server, the preprocessing comprising: filtering out biological sample information that does not conform to a preset characteristic extraction condition and integrating the user request information, and the integrating comprising: for each user, assigning a unique user identity to the user and combining the user identity of the user and biological sample information corresponding to the user;

assigning, by the central server, a biological recognition task for the target request information, saving the target request information to a storage platform, and distributing the biological recognition task to a computing server;

obtaining, by the computing server, the target request information corresponding to the biological recognition task from the storage platform according to the biological recognition task, extracting biological characteristics from the obtained target request information, and returning obtained extraction results to the central server;

combining, by the central server, the extraction results to obtain user behavior data, matching the user behavior data with user behavior characteristics preset in the storage platform, and generating processing result information according to a matching result;

returning, by the central server, the processing result information to the interaction end; and

reading and executing, by the interaction end, an instruction set from a local preset configuration file according to the processing result information, the instruction set being used for completing a man-machine interaction with a user.

2. The man-machine interaction method as claimed in claim 1, wherein after preprocessing, by the interaction end, the user request information, and sending the target request information obtained after preprocessing to the central server, and before assigning, by the central server, the biological recognition task for the target request information, saving the target request information to the storage platform, and distributing the biological recognition task to the computing server, the man-machine interaction method further comprises:

for the biological sample information that does not conform to the preset characteristic

extraction condition, sending, by the interaction end, an information collection abnormality message to the user and collecting the biological sample information again.

3. The man-machine interaction method as claimed in claim 1, wherein assigning, by the central server, the biological recognition task for the target request information, saving the target request information to the storage platform, and distributing the biological recognition task to the computing server comprises:

 caching, by the central server, the received target request information into a storage queue set up in advance;

 when the length of the storage queue reaches a preset threshold, starting, by the central server, a processing thread, the processing thread being used for saving the target request information to the storage platform, assigning the biological recognition task for the target request information, and distributing the biological recognition task to the computing server.

4. The man-machine interaction method as claimed in claim 3, wherein when the length of the storage queue reaches the preset threshold, starting, by the central server, the processing thread comprises:

 when the length of the storage queue reaches the preset threshold, taking, by the central server, the thread from a preset thread pool;

 calling, by the central server, the thread to save the target request information to the storage platform, and distributing the biological recognition task to the computing server.

5. The man-machine interaction method as claimed in claim 1, wherein reading and executing, by the interaction end, the instruction set from the local preset configuration file according to the processing result information comprises:

 when the interaction end fails to read the instruction set from the local preset configuration file, reading and executing, by the interaction end, the instruction set in a cloud preset configuration file from the central server.

6. The man-machine interaction method as claimed in claim 5, wherein when the interaction end fails to read the instruction set from the local preset configuration file, reading and executing, by the interaction end, the instruction set in the cloud preset configuration file from the central server comprises:

 when the interaction end fails to read or execute the instruction set in the cloud preset configuration file from the central server, sending, by the interaction end, alarm information to the user.

7. The man-machine interaction method as claimed in claim 6, wherein when the interaction end fails to read or execute the instruction set in the cloud preset configuration file

from the central server, after sending, by the interaction end, the alarm information to the user, the man-machine interaction method further comprises:

- sending, by the interaction end, an instruction set read failure message to the central server; and

- locating, by the central server, a physical location of the interaction end according to the instruction set read failure message, so as to prompt that the user needs manual assistance.

8. A man-machine interaction system, comprising: an interaction end, a central server and a computing server that are connected through a network;

- the interaction end is configured to collect user request information, the user request information comprising biological sample information; the interaction end is further configured to preprocess the user request information, and send target request information obtained after preprocessing to the central server, the preprocessing comprising: filtering out biological sample information that does not conform to a preset characteristic extraction condition and integrating the user request information, and the integrating comprising: for each user, assigning a unique user identity to the user and combining the user identity of the user and biological sample information corresponding to the user;

- the central server is configured to assign a biological recognition task for the target request information, save the target request information to a storage platform, and distribute the biological recognition task to the computing server;

- the computing server is configured to obtain the target request information corresponding to the biological recognition task from the storage platform according to the biological recognition task, extract biological characteristics from the obtained target request information, and return obtained extraction results to the central server;

- the central server is further configured to combine the extraction results to obtain user behavior data, match the user behavior data with user behavior characteristics preset in the storage platform, generate processing result information according to a matching result, and return the processing result information to the interaction end;

- the interaction end is further configured to read and execute an instruction set from a preset configuration file according to the processing result information, the instruction set being used for completing a man-machine interaction with a user.

9. The man-machine interaction system as claimed in claim 8, wherein the interaction end comprises:

- a checking module, configured for the interaction end to send an information collection abnormality message to the user for the biological sample information that does not conform

to the preset characteristic extraction condition, and collect the biological sample information again.

10. The man-machine interaction system as claimed in claim 8, wherein the central server comprises:

a data caching module, configured for the central server to cache the received target request information into a storage queue set up in advance; and

a thread processing module, configured for, when the length of the storage queue reaches a preset threshold, the central server to start a processing thread, the processing thread being used for saving the target request information to the storage platform, assigning the biological recognition task for the target request information, and distributing the biological recognition task to the computing server.

11. The man-machine interaction system as claimed in claim 10, wherein the thread processing module comprises:

a thread allocating sub-module, configured for, when the length of the storage queue reaches the preset threshold, the central server to take the thread from a preset thread pool; and

a thread executing sub-module, configured for the central server to call the thread to save the target request information to the storage platform, and distribute the biological recognition task to the computing server.

12. The man-machine interaction system as claimed in claim 8, wherein the interaction end further comprises:

an instruction obtaining module, configured for, when the interaction end fails to read the instruction set from the local preset configuration file, the interaction end to read and execute the instruction set in a cloud preset configuration file from the central server.

13. The man-machine interaction system as claimed in claim 12, wherein the instruction obtaining module comprises:

an alarm sub-module, configured for, when the interaction end fails to read or execute the instruction set in the cloud preset configuration file from the central server, the interaction end to send alarm information to the user.

14. The man-machine interaction system as claimed in claim 13, wherein the alarm sub-module comprises:

an alarm information returning unit, configured for the interaction end to send an instruction set read failure message to the central server;

the central server further comprises:

a locating module, configured for the central server to locate a physical location of the interaction end according to the instruction set read failure message, so as to prompt that the user needs manual assistance.

15. A computer device, comprising: a memory, a processor and a computer-readable instruction stored in the memory and capable of running on the processor, wherein the processor, when executing the computer-readable instruction, implements:

collecting, through an interaction end, user request information, the user request information comprising biological sample information;

preprocessing, through the interaction end, the user request information, and sending target request information obtained after preprocessing to a central server, the preprocessing comprising: filtering out biological sample information that does not conform to a preset characteristic extraction condition and integrating the user request information, and the integrating comprising: for each user, assigning a unique user identity to the user and combining the user identity of the user and biological sample information corresponding to the user ;

assigning, through the central server, a biological recognition task for the target request information, saving the target request information to a storage platform, and distributing the biological recognition task to a computing server;

obtaining, through the computing server, the target request information corresponding to the biological recognition task from the storage platform according to the biological recognition task, extracting biological characteristics from the obtained target request information, and returning obtained extraction results to the central server;

combining, through the central server, the extraction results to obtain user behavior data, matching the user behavior data with user behavior characteristics preset in the storage platform, and generating processing result information according to a matching result;

returning the processing result information to the interaction end through the central server; and

reading and executing, through the interaction end, an instruction set from a local preset configuration file according to the processing result information, the instruction set being used for completing a man-machine interaction with a user.

16. The computer device as claimed in claim 15, wherein after preprocessing, through the interaction end, the user request information, and sending the target request information obtained after preprocessing to the central server, and before assigning, through the central server, the biological recognition task for the target request information, saving the target

request information to the storage platform, and distributing the biological recognition task to the computing server, the processor, when executing the computer-readable instruction, further implements:

for the biological sample information that does not conform to the preset characteristic extraction condition, sending, through the interaction end, an information collection abnormality message to the user and collecting the biological sample information again.

17. The computer device as claimed in claim 15, wherein assigning, through the central server, the biological recognition task for the target request information, saving the target request information to the storage platform, and distributing the biological recognition task to the computing server comprises:

caching the received target request information into a storage queue set up in advance through the central server; and

when the length of the storage queue reaches a preset threshold, starting a processing thread through the central server, the processing thread being used for saving the target request information to the storage platform, assigning the biological recognition task for the target request information, and distributing the biological recognition task to the computing server.

18. The computer device as claimed in claim 17, wherein when the length of the storage queue reaches the preset threshold, starting the processing thread through the central server comprises:

when the length of the storage queue reaches the preset threshold, taking the thread from a preset thread pool through the central server; and

calling, through the central server, the thread to save the target request information to the storage platform, and distribute the biological recognition task to the computing server.

19. The computer device as claimed in claim 15, wherein reading and executing, through the interaction end, the instruction set from the local preset configuration file according to the processing result information comprises:

when the interaction end fails to read the instruction set from the local preset configuration file, reading and executing, through the interaction end, the instruction set in a cloud preset configuration file from the central server.

20. One or more non-transitory readable storage media storing a computer-readable instruction, wherein the computer-readable instruction, when executed by one or more processors, causes the one or more processors to perform:

collecting, through an interaction end, user request information, the user request

information comprising biological sample information;

preprocessing, through the interaction end, the user request information, and sending target request information obtained after preprocessing to a central server, the preprocessing comprising: filtering out biological sample information that does not conform to a preset characteristic extraction condition and integrating the user request information, and the integrating comprising: for each user, assigning a unique user identity to the user and combining the user identity of the user and biological sample information corresponding to the user;

assigning, through the central server, a biological recognition task for the target request information, saving the target request information to a storage platform, and distributing the biological recognition task to a computing server;

obtaining, through the computing server, the target request information corresponding to the biological recognition task from the storage platform according to the biological recognition task, extracting biological characteristics from the obtained target request information, and returning obtained extraction results to the central server;

combining, through the central server, the extraction results to obtain user behavior data, matching the user behavior data with user behavior characteristics preset in the storage platform, and generating processing result information according to a matching result;

returning the processing result information to the interaction end through the central server; and

reading and executing, through the interaction end, an instruction set from a local preset configuration file according to the processing result information, the instruction set being used for completing a man-machine interaction with a user.