

configured to receive user related information collected by an intelligence service terminal. The deep learning engine may be based on a human mind deep learning model, wherein the human mind deep learning model describes a manner that the brain encodes information, wherein the human mind deep learning model is trained separately for individuals based on individual related history data and further adjusted by individual's daily responses collected by the intelligence service terminal in use, and wherein the deep learning engine is further configured to identify a user intention or emotion from the received user related information and generate a corresponding response or command output. The output module may be configured to provide the corresponding response or command output to the intelligence service terminal.

[0006] In a second aspect of the present disclosure, there is provided an intelligence service terminal. The intelligence service terminal may comprise a user information acquisition module, an image acquisition module, a sound acquisition module, a data transmission module, a response receiving module and a control module. The user data acquisition module may be configured to acquire user related information from a body sensor associated with a user. The image acquisition module may be configured to capture a face image of the user. The sound acquisition module may be configured capture a voice input from the user. The data transmission module may be configured to transmit at least one of the user related information, the face image of the user, or a voice input from the user to an intelligence service platform system. The response receiving module may be configured to receive a response or command from the intelligence service platform system. The control module may be configured to control the intelligence service terminal to provide a response to the user based on the response or command from the intelligence service platform system, wherein the intelligence service platform system comprises a deep learning engine based on a human mind deep learning model, wherein the human mind deep learning model describes a manner that the brain encodes information, wherein the human mind deep learning model is trained separately for individuals based on individual related history data and further adjusted by individual's daily responses collected by the intelligence service terminal in use.

[0007] In a third aspect of the present disclosure, there is further provided a method for providing intelligence services at a service platform. The method may comprise receiving user related information collected by an intelligence service terminal;

identifying, by a deep learning engine, a user intention or emotion from the received information and generating a corresponding response or command output, wherein the human mind deep learning engine is based on a human mind deep learning model, wherein the human mind deep learning model describes a manner that the brain encodes information, and wherein the human mind deep learning model is trained separately for individuals based on individual related history data and further adjusted by individual's daily responses collected by the intelligence service terminal in use; and providing the corresponding response or command output to the intelligence service terminal.

[0008] In a fourth aspect of the present disclosure, there is further provided a method for providing intelligence services at an intelligence service terminal. The method may comprise acquiring user related information from body sensor associated with a user; capturing a face image of the user; capturing a voice input from the user; transmitting at least one of the user related data, the face image of the user, or the voice input from the user to an intelligence service platform system; receiving a response or command from the intelligence service platform system; and controlling the intelligence service terminal to provide a response to the user based on the response or command from the intelligence service platform system.

[0009] Disclosed herein is an intelligence server. The intelligence server may comprise a processor and a memory. The memory may be coupled with the processor and having program codes therein, which, when executed on the processor, cause intelligence server to perform operations of the third aspect.

[0010] Disclosed herein is an intelligence service terminal. The intelligence service terminal may comprise a processor and a memory. The memory may be coupled with the processor and have program codes therein, which, when executed on the processor, cause the intelligence service terminal to perform operations of the fourth aspect.

[0011] Disclosed herein is a computer-readable storage media with computer program codes embodied thereon, the computer program codes configured to, when executed, cause an apparatus to perform actions in the method according to any embodiment in the third aspect.

[0012] Disclosed herein is a computer-readable storage media with computer program codes embodied thereon, the computer program codes configured to, when

executed, cause an apparatus to perform actions in the method according to any embodiment in the fourth aspect.

[0013] Disclosed herein is a computer program product comprising a computer-readable storage media according to the seventh aspect.

[0014] Disclosed herein is a computer program product comprising a computer-readable storage media according to the eighth aspect.

[0015] With embodiments of the present disclosure, the deep learning model could be trained based on individual related history data and further adjusted by individual's daily responses collected by the intelligence service terminal in use, and thus the robot can learn from the user day by day and output appropriate commands or response to respective users accordingly without requiring pre-defined instructions and messages.

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] The above and other features of the present disclosure will become more apparent through detailed explanation on the embodiments as illustrated in the embodiments with reference to the accompanying drawings, throughout which like reference numbers represent same or similar components and wherein:

[0017] Fig. 1 schematically illustrates a diagram of an example architecture of an intelligence service system according to an embodiment of the present disclosure;

[0018] Fig. 2 schematically illustrates a diagram of an example intelligence service solution according to an embodiment of the present disclosure;

[0019] Fig. 3 schematically illustrates a diagram of an example intelligence service solution at the user's side according to an embodiment of the present disclosure;

[0020] Fig. 4 further illustrates an example daily activity management of the intelligence service terminal according to an embodiment of the present disclosure;

[0021] Fig. 5 illustrates another example healthy and emotion monitoring functionality of the intelligence service terminal according to an embodiment of the present disclosure;

[0022] Fig. 6 illustrates a block diagram of the intelligence service terminal according to an embodiment of the present disclosure;

CLAIMS

1. An intelligence service platform system, comprising:
 - an input module configured to receive user related information collected by an intelligence service terminal;
 - a deep learning engine based on a human mind deep learning model,
 - wherein the human mind deep learning model describes a manner that the brain encodes information,
 - wherein the human mind deep learning model is trained separately for individuals based on individual related history data and further adjusted by individual's daily responses collected by the intelligence service terminal in use, and
 - wherein the deep learning engine is further configured to identify a user intention or emotion from the received user related information and generate a corresponding response or command output thereto; and
 - an output module configured to provide the corresponding response or command output to the intelligence service terminal.
2. The intelligence service platform system of Claim 1, wherein the information collected by the intelligence service terminal comprises a face image of a user, and the deep learning engine is configured to interpret emotion of the user based on the face image and generate a corresponding response or command output to the intelligence service terminal.
3. The intelligence service platform system of Claims 1 or 2, wherein the individual related history data comprises on one or more of: game playing information, program selection information, robot communication information, music playing information, activity history information, healthy data, medical information, social context personality profile, family configurations, life style information, and personal tags.

4. The intelligence service platform system of any of Claims 1 to 3, wherein the deep learning engine is further configured to generate a daily scheduled activity plan and adapt the scheduled activity plan based on at least one of identified healthy condition or mood condition.

5. The intelligence service platform system of any of Claims 1 to 4, further comprising:

an input validation module configured to validate the received user related information collected by the intelligence service terminal and identify the intelligence service terminal collecting the user related information.

6. The intelligence service platform system of any of Claims 1 to 5, further comprising:

an information analysis module configured to perform lifestyle analytics on user history data.

7. The intelligence service platform system of any of Claims 1 to 6, further comprising:

an information analysis module configured to acquire, from an external professional assistance service entity, assistive information on the user associated with the intelligence service terminal, and to provide a professional analysis result as at least part of the response or command output to the intelligence service terminal.

8. The intelligence service platform system of Claim 7, wherein the external professional assistance service entity comprises at least one of medical school, public hospital, private hospital, mental health center, elderly health center, and rehabilitation center.

9. The intelligence service platform system of any of Claims 1 to 8, further comprising:

a user recording module configured to record information on individual users.

10. The intelligence service platform system of any of Claims 1 to 9, further comprising:

a content streaming module configured to stream contents between the intelligence service terminal and another terminal device.

11. The intelligence service platform system of any of Claims 1 to 10, further comprising:

a video compression module configured to compress a video content before transmitting.

12. The intelligence service platform system of any of Claims 1 to 11, further comprising:

a short message service module configured to transmit a short message between the intelligence service terminal and another terminal device.

13. The intelligence service platform system of any of Claims 1 to 12, further comprising:

a call center module configured to make a call to an emergency center or a specified person in response to detection of emergency regarding the user.

14. The intelligence service platform system of any of Claims 1 to 13, further comprising:

a billing module configured to bill services provided to the user.

15. The intelligence service platform system of any of Claims 1 to 14, further comprising:

a feedback management module configured to receive and manage feedbacks from users and provide a public information sharing and exchanging platform for users so that they could share and communicate their experiences.

16. The intelligence service platform system of any of Claims 1 to 15, further comprising:

a document management module configured to manage documents related to the intelligence service platform system.

17. The intelligence service platform system of any of Claims 1 to 16, wherein the intelligence service platform system is a cloud based system.

18. An intelligence service terminal, comprising:

a user information acquisition module, configured to acquire user related information from a body sensor associated with a user;

an image acquisition module, configured to capture a face image of the user;

a sound acquisition module, configured capture a voice input from the user;

a data transmission module, configured to transmit at least one of the user related information, the face image of the user, or a voice input of the user to an intelligence service platform system;

a response receiving module, configured to receive a response or command from the intelligence service platform system; and

a control module, configured to control the intelligence service terminal to provide a response to the user based on the response or command from the intelligence service platform system, wherein the intelligence service platform system comprises a deep learning engine based on a human mind deep learning model, wherein the human mind deep learning model describes a manner that the brain encodes information, wherein the human mind deep learning model is trained separately for individuals based on individual related history data and further adjusted by individual's daily responses collected by the intelligence service terminal in use.

19. The intelligence service terminal of Claim 18, further comprising:

a daily activity management module configured to provide a daily scheduled activity plan and track the progress of daily scheduled activity plan.

20. The intelligence service terminal of Claim 18 or 19, further comprising:

a daily activity scheduling module configured to provide a daily scheduled activity plan adapted in accordance with at least one of user's healthy condition or mood condition.

21. The intelligence service terminal of any of Claims 18 to 20, wherein the intelligence service terminal is an intelligence service robot, and wherein the control module is configured to control the intelligence service robot to sing or dance in the user's favorite tune to boost up user's emotion.

22. The intelligence service terminal of any of Claims 18 to 21, further comprising:
a connection module configured to enable the intelligence service terminal connect with other terminal devices.

23. The intelligence service terminal of any of Claims 18 to 22, wherein the at least one image capturing device is further configured to capture a Quick Response (QR) Code and wherein a corresponding application is executed in response to the captured QR code.

24. A method for providing intelligence services at a service platform, comprising:
receiving user related information collected by an intelligence service terminal;
identifying, by a deep learning engine, a user intention or emotion from the received information and generating a corresponding response or command output, wherein the deep learning engine is based on a human mind deep learning model, wherein the human mind deep learning model describes a manner that the brain encodes information, and wherein the human mind deep learning model is trained separately for individuals based on individual related history data and further adjusted by individual's daily responses collected by the intelligence service terminal in use; and
providing the corresponding response or command output to the intelligence service terminal.

25. The method of Claim 24, wherein the information collected by the intelligence service terminal comprises a face image of a user, the method further comprising:

interpreting, by the deep learning engine, emotion of the user based on the face image, and

generating a corresponding response or command output to the intelligence service terminal.

26. The method of Claims 24 or 25, wherein the individual related history data comprises on one or more of: game playing information, program selection information, robot communication information, music playing information, activity history information, healthy data, medical information, social context personality profile, family configurations, life style information, and personal tags.

27. The method of any of Claims 24 to 26, further comprising:
generating, by the deep learning engine, a daily scheduled activity plan and adapt the scheduled activity plan based on at least one of the identified healthy condition or mood condition.

28. The method of any of Claims 24 to 27, further comprising:
validating the received user related information collected by the intelligence service terminal and identifies the intelligence service terminal.

29. The method of any of Claims 24 to 28, further comprising:
performing lifestyle analytics on user history data.

30. The method of any of Claims 24 to 28, further comprising:
acquiring, from an external professional assistance service entity, assistive information on the user associated with the intelligence service terminal, and
providing a professional analysis result as at least part of the response or command output to the intelligence service terminal.

31. The method of Claim 30, wherein the external professional assistance service entity comprises at least one of medical school, public hospital, private hospital, mental health center, elderly health center, and rehabilitation center.

32. The method of any of Claims 24 to 31, further comprising at least one of:
recording information on individual users;
streaming contents between the intelligence service terminal and another terminal device;
compressing a video content before transmitting;
transmitting a short message between the intelligence service terminal and another terminal device;
making a call to an emergency center or a specified person in response to detection of emergency regarding the user associated with the intelligence service terminal;
billing services provided to the user;
receiving and managing feedbacks from users and provide a public information sharing and exchanging platform for users so that they could share and communicate their experiences; and
managing documents related to the intelligence service platform system.

33. A method for providing intelligence services at an intelligence service terminal, comprising:
acquiring user related information from body sensor associated with a user;
capturing a face image of the user;
capturing a voice input from the user;
transmitting at least one of the user related data, the face image of the user, or the voice input from the user to an intelligence service platform system;
receiving a response or command from the intelligence service platform system;
and
controlling the intelligence service terminal to provide a response to the user based on the response or command from the intelligence service platform system.

34. The method of claim 33, further comprising:
providing a daily scheduled activity plan and tracking the progress of daily scheduled activities.

35. The method of Claim 33 or 34 further comprising:
providing a daily scheduled activity plan adapted in accordance with at least one of user's healthy condition or mood condition.

36. The method of any of Claims 33 to 35, wherein the intelligence service terminal is an intelligence service robot, and the method further comprising:
controlling the intelligence service robot to sing or dance in the user's favorite tune to boost up user's emotion.

37. The method of any of Claims 33 to 36, further comprising:
capturing a Quick Response (QR) Code, wherein a corresponding application is executed in response to the captured QR code.