CLAIMS

What is claimed is:

1. An interacting computational robot system comprising:

an analysis server (130); and

a robot (120) configured to participate in interactions with at least two participants (110) and collect general and healthcare information related to the at least two participants (110);

wherein the at least two participants (110) comprise at least one healthcare recipient and at least one healthcare provider;

wherein the robot (120) generates a summary report (150) based on the collected general and healthcare information from the interaction between the robot (120), the at least one healthcare recipient, and the at least one healthcare provider, or accepts the summary report (150) from at least one of the at least two participants (110);

wherein the robot (120) is configured to transmit the summary report (150) to the analysis server (130) for analysis;

wherein the analysis server (130) is configured to analyze the summary report (150) and provide an indication of whether the summary report (150) passes or fails based on predetermined criteria;

when the summary report (150) is determined to pass, the summary report (150) is stored in a first database (143) of at least one of an Electronic Medical Record (EMR) system and an Electronic Health Record (EHR) system, and when the summary report (150) is determined to fail, the analysis server (130) generates feedback to the robot (120) with a list of one or more corrections needed for the summary report (150); and

wherein the analysis server (130) receives alterations and corrections provided by a user or at least one of the at least two participants (110) who has reviewed the generated feedback of the summary report (150).

2. The interacting computational robot system of claim 1, wherein after the analysis server (130) receives alterations and corrections provided by the user or at least one of the at least two participants (110), the summary report (150) is stored in the first database (143) of at least one of the Electronic Medical Record (EMR) system and the Electronic Health Record (EHR) system.

3. The interacting computational robot system of claim 1 or 2, wherein after the analysis server (130) receives alterations and corrections provided by the user or at least one of the at least two participants (110), the analysis server (130) reanalyzes the summary report (150) and provides an indication of whether the summary report (150) passes or fails based on the predetermined criteria.

4. The interacting computational robot system of any one of claims 1 to 3, wherein the predetermined criteria are developed using an AI model (132), wherein the AI model (132) is at least one of a large language AI model and a convolutional neural network AI model trained on healthcare knowledge, and
wherein the AI model (132) is developed using information from the at least two participants (110) or information from a second database (133) of different participants and is further configured to determine patterns between new participant information, background information, or the pass/fail determination of summary reports (150).

5. The interacting computational robot system of any one of claims 1 to 4, further comprising a display for communicating with the at least two participants (110), wherein the list of one or more corrections is provided to the user or at least one of the at least two participants (110) by way of the display, and the display is operable to receive further input from the user or at least one of the at least two participants (110) relating to the one or more corrections.

6. The interacting computational robot system of any one of claims 1 to 5, wherein the robot (120) further comprises one or more sensors (128) to collect information from the at least two participants (110), the one or more sensors (128) including a microphone, a camera, or an interface to receive vital sign information from the at least one healthcare recipient.

7. The interacting computational robot system of any one of claims 1 to 6, wherein the summary report (150) relates to a medical status of the at least one healthcare recipient and includes the at least one healthcare recipient's information, medication information, allergy information, or medical condition.

8. A method (200) of utilizing an interacting computational robot system comprising the following steps:
providing an analysis server (130);
utilizing a robot (120) configured to participate in interactions with at least two participants

(110), wherein the at least two participants (110) comprise at least one healthcare recipient and at least one healthcare provider (210);

collecting, by the robot (120), general and healthcare information relating to the at least two participants (110) (220);

generating a summary report (150) by the robot (120) based on the collected general and healthcare information from the interaction between the robot (120), the at least one healthcare recipient, and the at least one healthcare provider, or accepting the summary report (150) from at least one of the at least two participants (110) (240);

transmitting the summary report (150) by the robot (120) to the analysis server (130) for analysis (250);

analyzing the summary report (150) by the analysis server (130) and providing an indication of whether the summary report (150) passes or fails based on predetermined criteria (260);

when the summary report (150) is determined to pass, storing the summary report (150) in a first database (143) of at least one of an Electronic Medical Record (EMR) system and an Electronic Health Record (EHR) system (290), and when the summary report (150) is determined to fail, generating feedback by the analysis server (130) to the robot (120) with a list of one or more corrections needed for the summary report (150) (270, 280); and

receiving by the analysis server (130) alterations and corrections provided by a user or at least one of the at least two participants (110) who reviewed the generated feedback of the summary report (150).

9. The method of claim 8, further comprising after receiving by the analysis server (130) alterations and corrections provided by the user or at least one of the at least two participants (110), storing the summary report (150) in the first database (143) of at least one of the Electronic Medical Record (EMR) system and the Electronic Health Record (EHR) system.

10. The method of claim 8 or 9, further comprising after receiving by the analysis server (130) alterations and corrections provided by the user or at least one of the at least two participants (110), analyzing by the analysis server (130) the summary report (150) and providing an indication of whether the summary report (150) passes or fails based on the predetermined criteria.

11. The method of any one of claims 8 to 10, wherein the predetermined criteria are developed using an AI model (132), wherein the AI model (132) is at least one of a large

language AI model and a convolutional neural network AI model trained on healthcare knowledge, and

wherein the AI model (132) is developed using information from the at least two participants (110) or information from a second database (133) of different participants and is further configured to determine patterns between new participant information, background information, or the pass/fail determination of summary reports (150).

12. The method of any one of claims 8 to 11, further comprising utilizing a display for communicating with the at least two participants (110) and further comprising providing the list of one or more corrections to the user or at least one of the at least two participants (110) by way of the display, and wherein the display is operable to receive further input from the user or at least one of the at least two participants (110) relating to the one or more corrections.

13. The method of any one of claims 8 to 12, wherein the robot (120) further comprises one or more sensors (128) to collect information from the at least two participants (110), the one or more sensors (128) including a microphone, a camera, or an interface to receive vital sign information from the at least one healthcare recipient.

14. The method of any one of claims 8 to 13, wherein the summary report (150) relates to a medical status of the at least one healthcare recipient and includes the at least one healthcare recipient's information, medication information, allergy information, or medical condition.

15. A non-transitory computer readable storage medium comprising computer instructions that when executed by a processor cause the processor to execute the method of claim 8.