C L A I M S

What is claimed is:

1. A method for Artificial Intelligence (AI) computing information exchanging, comprising:

sending, by a first network element of a wireless communication network, a first message for load prediction to a second network element of the wireless communication network, wherein the first message comprises at least one of an input to a machine learning model for load prediction of the first network element or model configuration information of the machine learning model, wherein the input to the machine learning model comprises at least one of:

current load information of a current cell associated with and served by the first network element;

current load information of a neighbor cell of the current cell;

historical load information of the current cell; or

historical load information of the neighbor cell.

2. The method of claim 1, wherein the model configuration information of the machine learning model comprises at least one of:

a machine learning model type;

an AI algorithm information;

information of a hardware platform on which the machine learning model is run; or

training configuration information of the machine learning model.

3. The method of claim 2, wherein the machine learning model type comprises at least one of:

a time level model type;

a spatial level model type;

a historical level model type; or

a resemble model type.

4. The method of claim 2, wherein the AI algorithm information indicates at least one of:

an Autoregressive Integrated Moving Average (ARIMA) algorithm;

a Prophet model algorithm;

a Random Forest algorithm;

a Long Short Term Memory (LSTM) algorithm; or

an Ensemble Learning algorithm.

5. The method of claim 2, wherein the hardware platform information comprises at least one of:

a graphic processing unit (GPU) information;

a field programmable Gate Array (FPGA) information;

an application specific integrated circuit (ASIC) information; or

a system on a chip (SoC) information.

6. The method of claim 2, wherein the training configuration information comprises at least one of:

a gradient configuration;

a weight configuration;

a derivation configuration; or

a size of training parameters of the machine learning model.

7. The method of claim 1, wherein the first message comprises one of:

a Next-Generation Radio Access Network (NG-RAN) Node Configuration Update message;

a Next generation nodeB Distribution Unit (gNB-DU) Configuration Update message;

a Next generation nodeB Central Unit (gNB-CU) Configuration Update message;

an EN-DC Configuration Update message; or

an AI Configuration Update message.

8. The method of claim 7, further comprising:

receiving, by the first network element, a response message to the first message from the second network element.

9. The method of claim 8, wherein the response message comprises one of:

a NG-RAN Node Configuration Update Acknowledge message;

an AI Configuration Update Acknowledge message;

a gNB-DU Configuration Update Acknowledge message;

a gNB-CU Configuration Update Acknowledge message; or

an EN-DC Configuration Update Acknowledge message.

10. The method of claim 1, wherein the first message comprises a one-way AI Configuration Transfer message.

11. The method of claim 1, wherein the first network element or the second network element comprises a base station.

12. The method of claim 11, wherein the base station comprises at least one of:

a New Generation NodeB (gNB);

an Evolved NodeB (eNB); or

a NodeB.

13. The method of claim 1, wherein the first network element comprises a Distribution Unit (DU) of a base station and the second network element comprises a Central Unit (CU) of the base station.

14. The method of claim 1, wherein the first network element comprises a Central Unit (CU) of a base station and the second network element comprises a Distribution Unit (DU) of the base station.

15. The method of claim 1, wherein the first network element is configured to be a secondary node and the second network element is configured to be a master node, and wherein the first network element and the second network element form a dual connectivity configuration.

16. The method of claim 1, further comprising causing the second network element to adapt a machine learning model running on the second network element according to the AI computing information message.

17. A first network element comprising one or more processors and one or more memories, wherein the one or more processors are configured to read computer code from the one or more memories to:

send a first message for load prediction to a second network element, wherein the first message comprises at least one of an input to a machine learning model for load prediction of the first network element or model configuration information of the machine learning model;

receive a response message to the first message from the second network element;

wherein the input to the machine learning model comprises at least one of:

current load information of a current cell associated with and served by the first network element;

current load information of a neighbor cell of the current cell;

historical load information of the current cell; or

historical load information of the neighbor cell;

wherein the model configuration information of the machine learning model comprises at least one of:

a machine learning model type;

an AI algorithm information;

information of a hardware platform on which the machine learning model is run; or

training configuration information of the machine learning model.

wherein the first message comprises one of:

a Next-Generation Radio Access Network (NG-RAN) Node Configuration Update message;

a Next generation nodeB Distribution Unit (gNB-DU) Configuration Update message;

a Next generation nodeB Central Unit (gNB-CU) Configuration Update message;

an EN-DC Configuration Update message; or

an AI Configuration Update message; and

wherein the response message comprises one of:

a NG-RAN Node Configuration Update Acknowledge message;

an AI Configuration Update Acknowledge message;

a gNB-DU Configuration Update Acknowledge message;

a gNB-CU Configuration Update Acknowledge message; or

an EN-DC Configuration Update Acknowledge message.

18. The first network element of claim 17, wherein:

the AI algorithm information indicates at least one of:

an ARIMA algorithm;

a Prophet model algorithm;

a Random Forest algorithm;

a LSTM algorithm; or

an Ensemble Learning algorithm;

the hardware platform information comprises at least one of:

a GPU information;

an FPGA information;

an ASIC information; or

a SoC information; and

the training configuration information comprises at least one of:

a gradient configuration;

a weight configuration;

a derivation configuration; or

a size of training parameters of the machine learning model.

19. A non-transitory storage medium for storing computer readable instructions, the computer readable instructions, when executed by a processor in a first network element, causing the processor

to:

send a first message for load prediction to a second network element, wherein the first message comprises at least one of an input to a machine learning model for load prediction of the first network element or model configuration information of the machine learning model;

receive a response message to the first message from the second network element;

wherein the input to the machine learning model comprises at least one of:

current load information of a current cell associated with and served by the first network element;

current load information of a neighbor cell of the current cell;

historical load information of the current cell; or

historical load information of the neighbor cell;

wherein the model configuration information of the machine learning model comprises at least one of:

a machine learning model type;

an AI algorithm information;

information of a hardware platform on which the machine learning model is run; or

training configuration information of the machine learning model.

wherein the first message comprises one of:

a Next-Generation Radio Access Network (NG-RAN) Node Configuration Update message;

a Next generation nodeB Distribution Unit (gNB-DU) Configuration Update message;

a Next generation nodeB Central Unit (gNB-CU) Configuration Update message;

an EN-DC Configuration Update message; or

an AI Configuration Update message; and

wherein the response message comprises one of:

a NG-RAN Node Configuration Update Acknowledge message;

an AI Configuration Update Acknowledge message;

a gNB-DU Configuration Update Acknowledge message;

a gNB-CU Configuration Update Acknowledge message; or

an EN-DC Configuration Update Acknowledge message.

20. The non-transitory storage medium of claim 19, wherein:

the AI algorithm information indicates at least one of:

an ARIMA algorithm;

a Prophet model algorithm;

a Random Forest algorithm;

a LSTM algorithm; or

an Ensemble Learning algorithm;

the hardware platform information comprises at least one of:

a GPU information;

an FPGA information;

an ASIC information; or

a SoC information; and

the training configuration information comprises at least one of:

a gradient configuration;

a weight configuration;

a derivation configuration; or

a size of training parameters of the machine learning model.