CLAIMS

1. A machine learning model training method based on gradient boosting decision tree (GBDT), comprising:

obtaining a first sample set, the first sample set being a set of labeled samples obtained from a data domain of a source service scenario;

executing a GBDT algorithm by using the first sample set, and sequentially training a first plurality of decision trees until a training suspension condition is met;

determining training residual based on the first plurality of decision trees trained by using the first sample set;

obtaining a second sample set, the second sample set being a set of labeled samples obtained from a data domain of a target service scenario;

based on the training residual, continuing to execute the GBDT algorithm flow by using the second sample set, and sequentially training a second plurality of decision trees until a training stop condition is met; and

obtaining a target model by integrating at least the first plurality and the second plurality of decision trees.

2. The method according to claim 1, wherein the training suspension condition includes:

a number of the decision trees trained by using the first sample set reaches a first number.

3. The method according to claim 1, wherein the training stop condition includes:

a number of the decision trees trained by using the second sample set reaches a second number.

4. The method according to claim 1, further comprising:

before the continuing to execute the GBDT algorithm by using the second sample set, obtaining a third sample set, the third sample set being a set of labeled samples obtained from a data domain of another source service scenario;

based on the training residual, continuing to execute the GBDT algorithm by using the third sample set, and sequentially training a third plurality of decision trees until a training re-suspension condition is met; and

re-determining the training residual based on the first plurality of decision trees trained by using the first sample set and the third plurality of decision trees trained by using the third sample set.

5. The method according to claim 4, wherein the training re-suspension condition includes:

a number of the decision trees trained by using the third sample set reaches a third number.

6. The method according to claim 1, further comprising:

obtaining at least one to-be-predicted data feature from the data domain of the target service scenario;

determining, based on the at least one to-be-predicted data feature, one or more model input features; and

inputting the one or more model input features into the target model to output a prediction result.

7. An apparatus, comprising:

a first acquisition module, configured to obtain a first sample set, the first sample set being a set of labeled samples obtained from a data domain of a source service scenario;

a first training module, configured to execute a gradient boosting decision tree (GBDT) algorithm by using the first sample set, to train at least one decision tree until a training suspension condition is met;

a calculation module, configured to determine training residual based on the at least one decision tree trained by using the first sample set;

a second acquisition module, configured to obtain a second sample set, the second sample set being a set of labeled samples obtained from a data domain of a target service scenario; and

a second training module, configured to continue to execute the GBDT algorithm based on the training residual and by using the second sample set, to train at least one decision tree until a training stop condition is met,

wherein a target model is obtained by integrating the trained decision trees.

8. The apparatus according to claim 7, wherein the training suspension condition includes:

a number of the at least one decision tree trained by using the first sample set reaches a first number.

9. The apparatus according to claim 7, wherein the training stop condition includes:

a number of the at least one decision tree trained by using the first sample set reaches a second number.

10. The apparatus according to claim 7, further including:

a reprocessing module, configured to:

before the continuing to execute the GBDT algorithm based on the training residual and by using the second sample set, obtain a third sample set, the third sample set being a set of labeled samples obtained from a data domain of another source service scenario;

continue to execute the GBDT algorithm based on the training residual and by using the third sample set, to train at least one decision tree until a training re-suspension condition is met; and

re-determine the training residual based on the at least one decision tree trained by using the first sample set and the at least one decision tree trained by using the third sample set.

11. The apparatus according to claim 10, wherein the training re-suspension condition includes:

a number of the at least one decision tree trained by using the third sample set reaches a third number.

12. The apparatus according to claim 7, further comprising:

an acquisition module, configured to obtain at least one to-be-predicted data feature from a data domain of the target service scenario;

a determining module, configured to determine, based on the at least one to-be-predicted data feature, at least one model input feature; and

an input module, configured to input the at least one model input feature into the target model to output a prediction result.

13. A non-transitory storage medium storing contents that, when executed by one or more processors, cause the one or more processors to perform actions comprising:

obtaining a first sample set, the first sample set being a set of labeled samples obtained from a data domain of a source service scenario;

executing a gradient boosting decision tree (GBDT) algorithm by using the first sample set, and training at least one decision tree until a training suspension condition is met;

determining training residual based on the at least one decision tree trained by using the first sample set;

obtaining a second sample set, the second sample set being a set of labeled samples obtained from a data domain of a target service scenario;

based on the training residual, continuing to execute the GBDT algorithm by using the second sample set, and training at least one decision tree until a training stop condition is met; and

obtaining a target model by integrating the decision trees trained by using the first sample set and second sample set.

14. The storage medium according to claim 13, wherein the training suspension condition includes:

a number of the at least one decision tree trained by using the first sample set reaches a first number.

15. The storage medium according to claim 13, wherein the training stop condition includes:

a number of the at least one decision tree trained by using the second sample set reaches a second number.

16. The storage medium according to claim 13, wherein the actions further comprise:

before the continuing to execute the GBDT algorithm by using the second sample set, obtaining a third sample set, the third sample set being a set of labeled samples obtained from a data domain of another source service scenario;

based on the training residual, continuing to execute the GBDT algorithm by using the third sample set, and training at least one decision tree until a training re-suspension condition is met; and

re-determining the training residual based on the at least one decision tree trained by using the first sample set and the at least one decision tree trained by using the third sample set.

17. The storage medium according to claim16, wherein the training re-suspension condition includes:

a number of the at least one decision tree trained by using the third sample set reaches a third number.

18. The storage medium according to claim 13, wherein the actions further comprise:

obtaining at least one to-be-predicted data feature from the data domain of the target service scenario;

determining, based on the at least one to-be-predicted data feature, one or more model input features; and

inputting the one or more model input features into the target model to output a prediction result.

19. A device, comprising:

a processor; and

a memory having executable instructions stored thereon, the executable instructions, when executed by the processor, enabling the processor to implement the method of any one of claims 1 to 6.