

What is claimed is:

1. A method for scoring driving behavior, comprising:
 - obtaining driving behavior data, driving environment data, and business policy data of a target driver;
 - determining target feature data according to the driving behavior data, the driving environment data, and the business policy data of the target driver; and
 - inputting the target feature data into a driving behavior scoring model to obtain a driving behavior score of the target driver,wherein the method further comprising:
 - training a machine learning model by using sample data to obtain a driving behavior scoring model,wherein the training a machine learning model by using sample data to obtain a driving behavior scoring model comprises:
 - obtaining the sample data comprising driving behavior data, driving environment data, and business policy data of a sample driver;
 - determining sample feature data and a driving behavior score of the sample driver according to the driving behavior data, the driving environment data, and the business policy data of the sample driver; and
 - training the machine learning model according to the sample feature data and the driving behavior score of the sample driver to obtain the driving behavior scoring model.
2. The method of claim 1, wherein the obtaining driving behavior data, driving environment data, and business policy data of a target driver comprises:
 - obtaining the driving behavior data of the target driver by using a mobile software development kit module;
 - obtaining the driving environment data of the target driver by using a vehicle depth camera module; and
 - obtaining the business policy data of the target driver by a preset interface.
3. The method of claim 1 or 2, wherein the determining target feature data according to the driving behavior data, the driving environment data, and the business policy data of the target driver comprises:

extracting, from the driving behavior data of the target driver, a first feature of the target driver, the first feature comprising at least one of an average driving mileage, an average driving speed, number of rapid accelerations, number of rapid decelerations, number of sudden turns and whether fatigue driving or not;

extracting, from the driving environment data of the target driver, a second feature of the target driver, the second feature comprising at least one of a driving road condition state and number of lane changes;

extracting, from the business policy data of the target driver, a third feature and a fourth feature of the target driver, the third feature comprising personal basic information, and the fourth feature comprising at least one of policy purchase record information and claim history information; and

combining the first feature, the second feature, the third feature and the fourth feature to determine the target feature data.

4. The method of claim 1, wherein the determining sample feature data and a driving behavior score of the sample driver according to the driving behavior data, the driving environment data, and the business policy data of the sample driver comprises:

determining the sample feature data according to the driving behavior data, the driving environment data, and the business policy data of the sample driver; and

determining the driving behavior score of the sample driver according to the business policy data of the sample driver.

5. The method of claim 4, wherein the determining the sample feature data according to the driving behavior data, the driving environment data, and the business policy data of the sample driver comprises:

extracting, from the driving behavior data of the sample driver, a fifth feature of the sample driver;

extracting, from the driving environment data of the sample driver, a sixth feature of the sample driver;

extracting, from the business policy data of the sample driver, a seventh feature and an eighth feature of the sample driver; and

combining the fifth feature, the sixth feature, the seventh feature and the eighth

feature to determine the sample feature data; and

the determining the driving behavior score of the sample driver according to the business policy data of the sample driver comprises:

determining the driving behavior score of the sample driver according to the seventh feature and the eighth feature.

6. The method of claim 5, wherein the determining the driving behavior score of the sample driver according to the seventh feature and the eighth feature comprises:

calculating a claim rate of the sample driver according to the seventh feature and the eighth feature; and

determining, according to a preset mapping relationship table, the driving behavior score of the sample driver which having a mapping relationship with the claim rate, and the higher the claim rate, the lower the driving behavior score of the sample driver.

7. The method of any one of claims 1 to 6, wherein the machine learning model is a boosting tree model or a random forest model.

8. A device for scoring driving behavior, comprising:

an obtaining module configured to obtain driving behavior data, driving environment data, and business policy data of a target driver;

a determining module configured to determine target feature data according to the driving behavior data, the driving environment data, and the business policy data of the target driver; and

a scoring module configured to input the target feature data into a driving behavior scoring model to obtain a driving behavior score of the target driver,

wherein the device further comprising:

a training module configured to train a machine learning model by using sample data to obtain a driving behavior scoring model,

wherein the training module is configured to:

obtain the sample data comprising driving behavior data, driving environment data, and business policy data of a sample driver;

determine sample feature data and a driving behavior score of the sample driver according to the driving behavior data, the driving environment data, and the

business policy data of the sample driver; and

train the machine learning model according to the sample feature data and the driving behavior score of the sample driver to obtain the driving behavior scoring model.

9. The device of claim 8, wherein the obtaining module is configured to:

obtain the driving behavior data of the target driver by using a mobile software development kit module;

obtain the driving environment data of the target driver by using a vehicle depth camera module; and

obtain the business policy data of the target driver by a preset interface.

10. The device of claim 8 or 9, wherein the determining module is configured to:

extract, from the driving behavior data of the target driver, a first feature of the target driver, the first feature comprising at least one of an average driving mileage, an average driving speed, number of rapid accelerations, number of rapid decelerations, number of sudden turns and whether fatigue driving or not;

extract, from the driving environment data of the target driver, a second feature of the target driver, the second feature comprising at least one of a driving road condition state and number of lane changes;

extract, from the business policy data of the target driver, a third feature and a fourth feature of the target driver, the third feature comprising personal basic information, and the fourth feature comprising at least one of policy purchase record information and claim history information; and

combine the first feature, the second feature, the third feature and the fourth feature to determine the target feature data.

11. The device of claim 8, wherein the training module is configured to:

determine the sample feature data according to the driving behavior data, the driving environment data, and the business policy data of the sample driver; and

determine the driving behavior score of the sample driver according to the business policy data of the sample driver.

12. The device of claim 11, wherein the training module is configured to:

extract, from the driving behavior data of the sample driver, a fifth feature of the sample driver;

extract, from the driving environment data of the sample driver, a sixth feature of the sample driver;

extract, from the business policy data of the sample driver, a seventh feature and an eighth feature of the sample driver;

combine the fifth feature, the sixth feature, the seventh feature and the eighth feature to determine the sample feature data; and

determine the driving behavior score of the sample driver according to the seventh feature and the eighth feature.

13. The device of claim 12, wherein the training module is configured to:

calculate a claim rate of the sample driver according to the seventh feature and the eighth feature; and

determine, according to a preset mapping relationship table, the driving behavior score of the sample driver which having a mapping relationship with the claim rate, and the higher the claim rate, the lower the driving behavior score of the sample driver.

14. The device of any one of claims 8 to 13, wherein the machine learning model is a boosting tree model or a random forest model.

15. A computer device, comprising:

one or more processors; and

a memory configured to store one or more programs,

wherein when the one or more programs are executed by the one or more processors, causing the one or more processors implement the method for scoring the driving behavior according to any one of claims 1 to 7.

16. A computer readable storage medium on which a computer program is stored, wherein when the computer program is executed by a processor, the method for scoring the driving behavior according to any one of claims 1 to 7 is implemented.