CLAIMS

1. A system comprising:

a storage device storing a set of instructions; and

one or more processors in communication with the storage device, wherein when executing the set of instructions, the one or more processors are configured to cause the system to:

receive, via a network, a service order from a terminal;

obtain reference information relating to the service order;

determine actual information of the service order; and

determine, based on the reference information and the actual information, whether the service order is a cheating service order,

wherein to determine the actual information of the service order, the one or more processors are configured to cause the system to:

receive, via the network, checkpoint information relating to a plurality of checkpoints, the plurality of checkpoints being associated with the service order, each of the plurality of checkpoints being associated with a time point and a position;

arrange, based on the time points associated with the plurality of checkpoints, the plurality of checkpoints in chronological order;

determine a plurality of data groups relating to the service order based on the plurality of checkpoints, each of the plurality of data groups including two adjacent checkpoints in the chronological order; and

for each of the plurality of data groups, determine, based on time points and positions coordinates relating to the each of plurality of data groups, a time difference value, a distance value, and a speed value, and

wherein to determine, based on the reference information and the actual information, whether the service order is a cheating service order, the one or more processors are further configured to cause the system to:

for the each of the plurality of data groups:

determine whether the time difference value of the each of the plurality of data groups is less than or equal to the first predetermined time difference threshold;

determine, based on a result of the determination that the time difference value of the each of the plurality of data groups is less than or equal to the first predetermined time difference threshold, whether the distance value of the each

of the plurality of data groups is less than or equal to the predetermined distance threshold;

determine, based on a result of the determination that the distance value of the each of the plurality of data groups is less than or equal to the predetermined distance threshold, that the each of the plurality of data groups has reachability;

determine a proportion of the plurality of data groups that have reachability as a ratio of reachability of the service order;

determine whether the ratio of reachability is less than or equal to the predetermined probability; and

determine, based on a result of the determination that the ratio of reachability is less than or equal to the predetermined probability, that the service order is a cheating service order.

2. The system of claim 1, wherein to determine, based on the reference information and the actual information, whether the service order is a cheating service order, the one or more processors are configured to cause the system to:

for each of the plurality of data groups:

determine whether the time difference value of the each of the plurality of data groups is larger than the first predetermined time difference threshold;

determine, based on a result of the determination that the time difference value of the each of the plurality of data groups is larger than the first predetermined time difference threshold, whether the speed value of the each of the plurality of data groups is less than or equal to the speed threshold; and

determine, based on a result of the determination that the speed value of the each of the plurality of data groups is less than or equal to the speed threshold, that the each of the plurality of data groups has reachability.

3. The system of claim 1 or 2, wherein:

the reference information includes a recommended driving path and a reference time period, and the actual information includes an actual time period during which an acceleration of a vehicle associated with the service order equals to the first predetermined value, and

to determine, based on the reference information and the actual information, whether the service order is a cheating service order, the one or more processors are configured to cause the system to:

generate the recommended driving path based on a start location and a destination of the service order;

estimate, based on a congestion condition relating to the recommended driving path, a first reference time period during which an acceleration equals a first predetermined value;

estimate, based on intersection information relating to the recommended driving path, a second reference time period during which the acceleration equals the first predetermined value;

determine a sum of the first reference time period and the second reference time period;

designate the sum as the reference time period;

determine whether an absolute value of a time difference between the reference time period and the actual time period is larger than a second predetermined time difference threshold; and

determine, based on a result of the determination that the absolute value of the time difference is larger than the second predetermined time difference threshold, that the service order is a cheating service order.

4. The system of any one of claims 1 to 3, wherein the reference information includes a recommended driving path, reference driving trails, and a deviation threshold, and the actual information of the service order includes coordinate points belonging to the each of the plurality of segments and uploaded by a driver terminal in a process for completing the service order, the plurality of segments obtained by dividing the recommended driving path into a plurality of segments, and

to determine, based on the reference information and the actual information, whether the service order is a cheating service order, the one or more processors are configured to cause the system to:

generate the recommended driving path based on a start location and a destination of the service order;

for each of the plurality of segments, determine a reference fitting function relating to the each of the plurality of segments;

designate the reference fitting function as the reference driving trail corresponding to the each of the plurality of segments;

determine a deviation between the coordinate points belonging to the each of the plurality of segments and a reference driving trail corresponding to the each of the plurality of segments;

determine, based on the deviations of the plurality of segments, an average deviation relating to the plurality of segments;

determine whether the average deviation is less than the deviation threshold; and

determine, based on a result of the determination that the average deviation is less than the deviation threshold, that the service order is a cheating service order.

5. The system of claim 4, wherein the reference information includes a predetermined number, and

to determine, based on the reference information and the actual information, whether the service order is a cheating service order, the one or more processors are configured to cause the system to:

determine, based on the actual information, a number count of segments of an actual driving path relating to the service order;

determine whether the number count is equal to or larger than the predetermined number; and

determine, based on a result of the determination that the number count is equal to or larger than the predetermined number, that the service order is not a cheating service order.

6. A method implemented on a computing device having one or more processors and a storage device, the method comprising:

receiving, via a network, a service order from a terminal;

obtaining reference information relating to the service order;

determining actual information of the service order; and

determining, based on the reference information and the actual information, whether the service order is a cheating service order,

wherein determining the actual information of the service order comprises:

receiving, via the network, checkpoint information relating to a plurality of checkpoints, the plurality of checkpoints being associated with the service order, each of the plurality of checkpoints being associated with a time point and a position;

arranging, based on the time points associated with the plurality of checkpoints, the plurality of checkpoints in chronological order;

determining a plurality of data groups relating to the service order based on the plurality of checkpoints, each of the plurality of data groups including two adjacent checkpoints in the chronological order; and

for each of the plurality of data groups, determining, based on time points and positions coordinates relating to the each of plurality of data groups, a time difference value, a distance value, and a speed value, and

wherein determining, based on the reference information and the actual information, whether the service order is a cheating service order comprised:

for the each of the plurality of data groups:

determining whether the time difference value of the each of the plurality of data groups is less than or equal to the first predetermined time difference threshold;

determining, based on a result of the determination that the time difference value of the each of the plurality of data groups is less than or equal to the first predetermined time difference threshold, whether the distance value of the each of the plurality of data groups is less than or equal to the predetermined distance threshold;

determining, based on a result of the determination that the distance value of the each of the plurality of data groups is less than or equal to the predetermined distance threshold, that the each of the plurality of data groups has reachability;

determining a proportion of the plurality of data groups that have reachability as a ratio of reachability of the service order;

determining whether the ratio of reachability is less than or equal to the predetermined probability; and

determining, based on a result of the determination that the ratio of reachability is less than or equal to the predetermined probability, that the service order is a cheating service order.

7. The method of claim 6, wherein determining, based on the reference information and the actual information, whether the service order is a cheating service order comprises:

for each of the plurality of data groups:

determining whether the time difference value of the each of the plurality of data groups is larger than the first predetermined time difference threshold;

determining, based on a result of the determination that the time difference value of the each of the plurality of data groups is larger than the first predetermined time difference threshold, whether the speed value of the each of the plurality of data groups is less than or equal to the speed threshold; and

determining, based on a result of the determination that the speed value of the each of the plurality of data groups is less than or equal to the speed threshold, that the each of the plurality of data groups has reachability.

8. The method of claim 6 or 7, wherein:

the reference information includes a recommended driving path and a reference time period, and the actual information includes an actual time period during which an acceleration of a vehicle associated with the service order equals to the first predetermined value, and

determining, based on the reference information and the actual information, whether the service order is a cheating service order, the one or more processors are configured to cause the method to:

generating the recommended driving path based on a start location and a destination of the service order;

estimating, based on a congestion condition relating to the recommended driving path, a first reference time period during which an acceleration equals a first predetermined value;

estimating, based on intersection information relating to the recommended driving path, a second reference time period during which the acceleration equals the first predetermined value;

determining a sum of the first reference time period and the second reference time period;

designating the sum as the reference time period;

determining whether an absolute value of a time difference between the reference time period and the actual time period is larger than a second predetermined time difference threshold; and

determining, based on a result of the determination that the absolute value of the time difference is larger than the second predetermined time difference threshold, that the service order is a cheating service order.

9. The method of any one of claims 6 to 8, wherein the reference information includes a recommended driving path, reference driving trails, and a deviation threshold,

and the actual information of the service order includes coordinate points belonging to the each of the plurality of segments and uploaded by a driver terminal in a process for completing the service order, the plurality of segments obtained by dividing the recommended driving path into a plurality of segments, and

determining, based on the reference information and the actual information, whether the service order is a cheating service order comprises:

generating the recommended driving path based on a start location and a destination of the service order;

for each of the plurality of segments, determining a reference fitting function relating to the each of the plurality of segments;

designating the reference fitting function as the reference driving trail corresponding to the each of the plurality of segments;

determining a deviation between the coordinate points belonging to the each of the plurality of segments and a reference driving trail corresponding to the each of the plurality of segments;

determining, based on the deviations of the plurality of segments, an average deviation relating to the plurality of segments;

determining whether the average deviation is less than the deviation threshold; and

determining, based on a result of the determination that the average deviation is less than the deviation threshold, that the service order is a cheating service order.

10. The method of claim 9, wherein the reference information includes a predetermined number, and

determining, based on the reference information and the actual information, whether the service order is a cheating service order comprises:

determining, based on the actual information, a number count of segments of an actual driving path relating to the service order;

determining whether the number count is equal to or larger than the predetermined number; and

determining, based on a result of the determination that the number count is equal to or larger than the predetermined number, that the service order is not a cheating service order.

11. A non-transitory computer-readable medium storing instructions that, when executed by one or more processors of a system, cause the system to:

receive, via a network, a service order from a terminal;

obtain reference information relating to the service order;

determine actual information of the service order; and

determine, based on the reference information and the actual information, whether the service order is a cheating service order,

wherein to determine the actual information of the service order, the one or more processors cause the system to:

receive, via the network, checkpoint information relating to a plurality of checkpoints, the plurality of checkpoints being associated with the service order, each of the plurality of checkpoints being associated with a time point and a position;

arrange, based on the time points associated with the plurality of checkpoints, the plurality of checkpoints in chronological order;

determine a plurality of data groups relating to the service order based on the plurality of checkpoints, each of the plurality of data groups including two adjacent checkpoints in the chronological order; and

for each of the plurality of data groups, determine, based on time points and positions coordinates relating to the each of plurality of data groups, a time difference value, a distance value, and a speed value, and

wherein to determine, based on the reference information and the actual information, whether the service order is a cheating service order, the one or more processors cause the system to:

for the each of the plurality of data groups:

determine whether the time difference value of the each of the plurality of data groups is less than or equal to the first predetermined time difference threshold;

determine, based on a result of the determination that the time difference value of the each of the plurality of data groups is less than or equal to the first predetermined time difference threshold, whether the distance value of the each of the plurality of data groups is less than or equal to the predetermined distance threshold;

determine, based on a result of the determination that the distance value of the each of the plurality of data groups is less than or equal to the predetermined distance threshold, that the each of the plurality of data groups has reachability;

determine a proportion of the plurality of data groups that have reachability as a ratio of reachability of the service order;

determine whether the ratio of reachability is less than or equal to the predetermined probability; and

determine, based on a result of the determination that the ratio of reachability is less than or equal to the predetermined probability, that the service order is a cheating service order.