CLAIMS

1. An electronic device (100B) comprising:

a trajectory data acquisition circuit configured to acquire current trajectory data, the current trajectory data including trajectory data of a current geographical area of a plurality of geographical areas;

a communication circuit configured to receive pre-trained weights for a trained classifier; and

a processor configured to use the trained classifier configured with the pre-trained weights to calculate, based on the trajectory data, a probability of future overspeeding,

wherein the processor is configured to calculate the probability of future overspeeding further based on a distribution of speed for the current geographical area, and

the distribution of speed is de-skewed based on an inverse proportional relation to a speed of datapoints of the distribution, before calculating the probability of future overspeeding.

2. The electronic device (100B) of claim 1, wherein the communication circuit is further configured to receive a percentile or a threshold speed of each geographical area (217, 717) of the plurality of geographical areas to the electronic device (100B).

3. The electronic device (100B) of claim 2, wherein the communication circuit is further configured to receive respective percentiles or respective threshold speed for all of the plurality of geographical areas.

4. The electronic device (100B) of any one of claims 1 to 3, wherein the electronic device (100B) is further configured to determine if the probability of future overspeeding is higher than a pre-determined threshold.

5. The electronic device (100B) of claim 4, wherein the electronic device (100B) is further configured to, if the probability of future overspeeding is higher than the pre-determined threshold, issue an alert.

6. The electronic device (100B) of any one of claims 1 to 5, wherein the processor is configured to calculate the probability of future overspeeding further based on current contextual data comprising current contextual information.

7. The electronic device (100B) of claim 6, wherein the current contextual data comprises current weather data.

8. The electronic device (100B) of claim 6 or claim 7, wherein the current contextual data comprises driver profile data of a driver associated with a vehicle, wherein each of training driver profile data and the driver profile data comprises respective vehicle characteristics data and/or driver features.

9. The electronic device (100B) of any one of claims 6 to 8, wherein the current contextual data comprises one or more of respective: time of a day, day of a week, and public holiday data.

10. The electronic device (100B) of any one of claims 6 to 9, wherein the current contextual data comprises one or more of respective: road condition data, road characteristics data, current traffic pattern, and neighborhood type.

11. A system comprising a server (100A) and a plurality of electronic devices (100B),

wherein each device of the plurality of electronic devices (100B) is associated with a vehicle of a fleet and is configured according to any one of claims 1 to 10;

wherein the server (100A) is configured to obtain historical trajectory data (552) of the fleet of each geographical area (217, 717) of a plurality of geographical areas from an electronic database (111); and

wherein the server (100A) is configured to generate pre-trained weights as a result of training the classifier, and further configured to upload the pre-trained weights to the electronic device (100B) thereby providing the trained classifier on the electronic device (100B).

12. A non-transitory computer-readable medium storing computer executable code comprising instructions to:

obtain current trajectory data from a trajectory data acquisition circuit, the current trajectory data including trajectory data of a current geographical area of a plurality of geographical areas;

receive pre-trained weights for a trained classifier from a server (100A) via a communication circuit;

configure a classifier with pre-trained weights into a trained classifier; and

calculate, using the trained classifier and based on the trajectory data, a probability of future overspeeding,

wherein the probability of future overspeeding is calculated further based on a distribution of speed for the current geographical area, and

the distribution of speed is de-skewed based on an inverse proportional relation to a speed of datapoints of the distribution, before calculating the probability of future overspeeding.