CLAIMS

What is claimed is:

1. A method for detecting a weather condition of a location, comprising:

determining, by a processor, whether an audio recording of the location from a user device at the location corresponds to the weather condition, the determination being based on historical data indicating at least one corresponding sound for the weather condition; and

detecting, by the processor, the weather condition of the location based on the determination.

2. The method of claim 1, wherein determining whether the audio recording of the location from the user device at the location corresponds to the weather condition further comprises:

determining, for each of one or more segments of the audio recording, whether each segment corresponds to the weather condition based on the historical data, the determination being made in real time as the user device is recording each segment at the location;

filtering a determination result for each of the one or more segments based on a threshold; and

determining the weather condition of the location based on the filtered determination result.

3. The method of any one of claims 1-2, wherein detecting the weather condition of the location further comprises:

requesting a verification from the user device whether a determined weather condition for the location is correct; and

confirming the weather condition of the location based on the verification.

4. The method of any one of claims 1-2, wherein detecting the weather condition of the location further comprises:

determining whether a user associated with the user device is driving, the determination based on a trip booking associated with the user;

requesting a verification from another user device whether a determined weather condition for the location is correct, the another user device being a requestor of the trip booking; and

confirming the weather condition of the location based on the verification.

5. The method of any one of claims 3-4, further comprising:

in response to the verification, identifying one or more other user devices within a proximity from the user device;

further determining whether an audio recording from each of the one or more other user devices corresponds to a weather condition;

requesting a further verification from each of the one or more other user devices whether a further determined weather condition for each of the one or more other user devices is correct; and

further confirming the weather condition of the location based on the further verification from each of the one or more other user devices.

6. The method of claim 5, further comprising determining an area around the location with the determined weather condition based on the verification and the further verification.

7. The method of claim 5 or claim 6, further comprising determining an intensity of the determined weather condition based on the verification and the further verification.

8. The method of any one of claims 1-7, wherein determining whether the audio recording of the location from the user device at the location corresponds to the weather condition further comprises filtering noise from the audio recording based on the location as well as a vehicle and an activity associated with the user device, the filtering being based on the historical data further indicating at least one sound associated with each of the location, the vehicle and the activity.

9. The method of any one of claims 1-7, further comprising determining whether the audio recording corresponds to an indication that the location is sheltered, the determination being based on the historical data further indicating at least one sound associated with a sheltered area; and detecting whether the location is sheltered based

on the determination whether the audio recording corresponds to the indication that the location is sheltered.

10. The method of claim 9, further comprising recommending a route to the user based on the determination whether the audio recording corresponds to the indication that the location is sheltered.

11. The method of any one of claims 1-10, further comprising aggregating data relating to a plurality of previous detections of weather conditions of the location, and detecting the weather condition of the location further based on the aggregated data.

12. A system for detecting a weather condition of a location, comprising:

at least one processor; and at least one memory including computer program code; the at least one memory and the computer program code configured to, with the at least one processor, cause the system at least to:

determine whether an audio recording of the location from a user device at the location corresponds to the weather condition, the determination being based on historical data indicating at least one corresponding sound for the weather condition; and

detect the weather condition of the location based on the determination.

13. The system of claim 12, wherein determining whether the audio recording of the location from the user device at the location corresponds to the weather condition further comprises:

determining, for each of one or more segments of the audio recording, whether each segment corresponds to the weather condition based on the historical data, the determination being made in real time as the user device is recording each segment at the location;

filtering a determination result for each of the one or more segments based on a threshold; and

determining the weather condition of the location based on the filtered determination result.

14. The system of any one of claims 12-13, wherein detecting the weather condition of the location further comprises:

requesting a verification from the user device whether a determined weather condition for the location is correct; and

confirming the weather condition of the location based on the verification.

15. The system of any one of claims 12-13, wherein detecting the weather condition of the location further comprises:

determining whether a user associated with the user device is driving, the determination based on a trip booking associated with the user;

requesting a verification from another user device whether a determined weather condition for the location is correct, the another user device being a requestor of the trip booking; and

confirming the weather condition of the location based on the verification.

16. The system of any one of claims 14-15, further configured to:

in response to the verification, identify one or more other user devices within a proximity from the user device;

further determine whether an audio recording from each of the one or more other user devices corresponds to a weather condition;

request a further verification from each of the one or more other user devices whether a further determined weather condition for each of the one or more other user devices is correct; and

further confirm the weather condition of the location based on the further verification from each of the one or more other user devices.

17. The system of claim 16, further configured to determine an area around the location with the determined weather condition based on the verification and the further verification.

18. The system of claim 16 or claim 17, further comprising determining an intensity of the determined weather condition based on the verification and the further verification.

19. The system of any one of claims 12-18, wherein determining whether the audio recording of the location from the user device at the location corresponds to the weather condition further comprises filtering noise from the audio recording based on the location as well as a vehicle and an activity associated with the user device, the filtering being

based on the historical data further indicating at least one sound associated with each of the location, the vehicle and the activity.

20. The system of any one of claims 12-19, further configured to determine whether the audio recording corresponds to an indication that the location is sheltered, the determination being based on the historical data further indicating at least one sound associated with a sheltered area; and detect whether the location is sheltered based on the determination whether the audio recording corresponds to the indication that the location is sheltered.

21. The system of claim 20, further configured to recommend a route to the user based on the determination whether the audio recording corresponds to the indication that the location is sheltered.

22. The system of any one of claims 12-21, further configured to aggregate data relating to a plurality of previous detections of weather conditions of the location, and detecting the weather condition of the location further based on the aggregated data.