CLAIMS

WHAT IS CLAIMED IS:

1. A method of processing a plurality of transport service transactions, the method comprising:

for each transport service transaction of the plurality of transport service transactions, determining a transport service location at a point of interest entity, the transport service transaction having been executed at the transport service location;

clustering transport service locations at the point of interest entity determined for the plurality of transport service transactions;

determining one or more candidate transport service locations at the point of interest entity based on the clustering; and

providing the one or more candidate transport service locations at the point of interest entity to a client or a service provider associated with a transport service transaction that is to be executed at the point of interest entity.

2. The method of claim 1, wherein a transport service location is one of a pickup location, a drop-off location, or a delivery location, wherein a transport service transaction comprises picking up or dropping off one or more persons or one or more items by a service provider at a request of a client.

3. The method of claim 1 or 2, wherein the transport service location is determined based on GPS data and provider application software interaction data.

4. The method of any one of claims 1-3, wherein the transport service location is determined based on at least one of an image of the transport service location, a video of the transport service location, telematics data, audio signals, dashboard camera output, client interactions, or chat logs.

5. The method of any one of claims 1-4, further comprising:

selecting a proposed solution to seek human feedback; and

refining the one or more candidate transport service locations based on the human feedback.

6. The method of any one of claims 1-5, wherein the clustering of the transport service locations comprises dynamically adjusting clustering parameters.

7. The method of claim 6, wherein the clustering parameters comprise the maximum neighborhood radius and a minimum number of points required to form a cluster.

8. The method of any one of claims 1-7, wherein the clustering of the transport service locations comprises:

for each transport service location of the transport service locations, approximating a point density distribution of the transport service location; and

automatically adjusting a maximum neighborhood radius of the clustering based on the approximate point density distribution.

9. The method of any one of claims 1-8, further comprising:

receiving a second plurality of transport service transactions associated with the point of interest entity; and

updating the one or more candidate transport service locations based on the second plurality of transport service transactions.

10. An apparatus for processing a plurality of transport service transactions, the apparatus comprising:

at least one memory; and

at least one processor coupled to the at least one memory and configured to:

for each transport service transaction of the plurality of transport service transactions, determine a transport service location at a point of interest entity, the transport service transaction having been executed at the transport service location;

cluster the transport service locations at the point of interest entity determined for the plurality of transport service transactions;

determine one or more candidate transport service locations at the point of interest entity based on the clustering; and

provide the one or more candidate transport service locations at the point of interest entity to a client or a service provider associated with a transport service transaction that is to be executed at the point of interest entity.

11. The apparatus of claim 10, wherein a transport service location is one of a pickup location, a drop-off location, or a delivery location, wherein a transport service transaction comprises picking up or dropping off one or more persons or one or more items by a service provider at a request of a client.

12. The apparatus of claim 10 or 11, wherein the transport service location is determined based on GPS data and provider application software interaction data.

13. The apparatus of any one of claims 10-12, wherein the transport service location is determined based on at least one of an image of the transport service location, a video of the transport service location, telematics data, audio signals, dashboard camera output, client interactions, or chat logs.

14. The apparatus of any one of claims 10-13, wherein the at least one processor is further configured to:

select a proposed solution to seek human feedback; and

refine the one or more candidate transport service locations based on the human feedback.

15. The apparatus of any one of claims 10-14, wherein, to cluster the transport service locations, the at least one processor is configured to dynamically adjust clustering parameters.

16. The apparatus of claim 15, wherein the clustering parameters comprise the maximum neighborhood radius and a minimum number of points required to form a cluster.

17. The apparatus of any one of claims 10-16, wherein, to cluster the transport service locations, the at least one processor is configured to:

for each transport service location of the transport service locations, approximate a point density distribution of the transport service location; and

automatically adjust a maximum neighborhood radius of the clustering based on the approximate point density distribution.

18. The apparatus of any one of claims 10-17, wherein the at least one processor is further configured to:

receive a second plurality of transport service transactions associated with the point of interest entity; and

update the one or more candidate transport service locations based on the second plurality of transport service transactions.

19. A non-transitory computer-readable medium storing computer executable code for processing a plurality of transport service transactions, comprising instructions for:

for each transport service transaction of the plurality of transport service transactions, determining a transport service location at a point of interest entity, the transport service transaction having been executed at the transport service location;

clustering the transport service locations at the point of interest entity determined for the plurality of transport service transactions;

determining one or more candidate transport service locations at the point of interest entity based on the clustering; and

providing the one or more candidate transport service locations at the point of interest entity to a client or a service provider associated with a transport service transaction that is to be executed at the point of interest entity.

20. The non-transitory computer-readable medium of claim 19, wherein a transport service location is one of a pickup location, a drop-off location, or a delivery location, wherein a transport service transaction comprises picking up or dropping off one or more persons or one or more items by a service provider at a request of a client.