Description for the algorithms in experiments

TD-NE: proposed by Ugur Demiryurek[1], which applied the INE[2] algorithm for static road network to the time dependent road network.

TD-NE-A: proposed by Cruz[3] , which utilized the heuristic value and pruning strategy for expansion based on TD-NE, and compared with TD-NE. It is similar to A\* algorithm, and the minimum value of a whole day is regards as the heuristic value .

TD-FTT: proposed by Komai[4], in which the heuristic function of TD-NE-A is optimized, and compared with TD-NE. It is similar to A\* algorithm, and the minimum value of several time intervals are regards as the heuristic value respectively.

**Dataset of the experiments:**

* Nodes: 6105
* Edges: 7035
* Time interval: divide 24 hours into 288 time intervals, that is, each 5 minutes is regards as one time interval. The piecewise linear function for each edge can be obtained by run the SEEP algorithm.

**The compared algorithms:**

* TD-Dijkstra；
* TD-NE-A: without any pruning strategy, the minimum value of a whole day is used as heuristic value；
* **TDA: utilizes the proposed pruning strategy, and the minimum value of 6 time intervals are used as heuristic values respectively.**