

Searching and Ranking Activity-based Carpooling Rides

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Abstract. This extended abstract shortly summarizes the work in [2] a prototype of COMEWITHME, an innovative carpooling service oriented to the passenger's intended activity. This approach boosts the number of available rides, differently from the current carpooling system based on fixed destination location. The COMEWITHME ride search engine was modeled to support scalability constraints through an inverted index. Furthermore, a ranking model orders the possible retrieved riders according to the convenience of the passenger.

The development of the cities provides several places where to perform our daily activities. Usually people can find worth options of restaurants, gyms, cinemas, supermarkets and so on, thus not to be restricted to move to a fixed place [1,3]. This extended abstract shortly summarizes the work in [2] a prototype of COMEWITHME, a carpooling service that takes into account the desired activity of the passenger offering additional destinations, besides to allow the delay/anticipate of their movements. COMEWITHME was developed using information retrieval techniques to supply requirements in scalability and efficiency on the query processing. An inverted index is used to optimize the retrieval of the possible rides, and a ranking model is applied to score the results according to the convenience of the user. The usability is achieved by providing a user-friendly mobile interface running on smart-phones, while an evaluation of the system is object of ongoing work.

References

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