## **An Innovative Tour Recommendation System for Tourists in Japan**

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Abstract— The paper demonstrates prototype of system that is capable of suggesting optimal touring plans which are composed of various points of interest (POI) and take travelers' preferences and context into account. It systematically collects and analyzes information on thousands of tourists attraction areas and geographical nodes of Japan Railway (JR) train stations together with concurrent weather information, estimated travel time, associated expenses, and lists of multiple cultural events in order to demonstrate practicality as well as reliability of the system. A programmatic approach based on the heuristic greedy search is employed for transforming the obtained data into informative routes. It demonstrates the feasibility of the approach through its mobile prototype on web platform and tests it under various scenarios in eight different places in Japan which includes Tokyo, Osaka, Kyoto, Kobe, Yokohama, Nagoya, Fukuoka and Sapporo. Its result and the performance can be considered as a stepping stone towards a more localized and practical recommendation system in the field of tourism in the near future.

Keyword— e-tourism, travel planning system, web scraping, modeling, and data mining.



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