中央研究院 資訊科學研究所
Institute of Information Science, Academia Sinica

Distinguished Lecture Series

Algorithms for the Next Generation Route Planner

Tuesday, May 17th, 2016 10:00am
Auditorium 106

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Abstract

Nowadays, route planning systems belong to the most frequently used information systems at all. The algorithmic core problem of such systems is the classical shortest paths problem that can be solved by Disjkstra's algorithm in almost linear time. However, Dijkstra's algorithm still takes a few seconds in continental-sized graphs, which is too slow for practical scenarios.

Algorithms for route planning in transportation networks have recently undergone a rapid development, leading to methods that are up to several million times faster than Dijkstra's algorithm. This talk provides a condensed survey of recent developments in the field.

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