Abstract

Mobile devices leave a huge number of digital traces that are collected as trajectories, describing the movement of its users or a path followed by any moving object in geographical space over some period of time. However, those mobile devices provide just raw trajectories (x, y, t), ignoring information about their related contextual data, these additional data contribute in producing significant knowledge about movements and provide applications with richer and more meaningful knowledge. Therefore, researchers focus on transforming raw trajectories into semantic trajectories by combining the raw mobility tracks with related contextual data and creating a new type of trajectories called “semantic trajectories”, then applying mining techniques. This paper study closely the current researches on modeling and mining semantic trajectories so far, and try to investigate by proposing a descriptive schema including all steps that users can browse from the construction of the trajectories to the analyze of behaviors extracted.

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Index Terms

Computer Science Information Sciences
Keywords

Semantic trajectories, extracting knowledge, semantic enrichment, spatial data mining.