In Search for Relevant, Diverse and Crowd-screen POIs
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WHERE TO GO??

MPG (Mobile Person Guide) [1]
- Assist users to explore a new city and find interesting POIs.
- Provide diverse POI recommendations that better align user’s interest.
- Provide multi-platform user-friendly interfaces.
- Backend system delivers fast response time and scalability.
- Supports as experiment subject nine recommendation algorithms.
- Real-time quality analysis of the recommendations.
- Real-time visualization for better comparison between different algorithms.

Main Features of MPG
- **Multiple Spatial Indexes For Fast Range Query**
  - M-Tree, K-Medoids and etc..
- **Multi Granularity Diversification Method**
  - Category Tree
  - Word2Vec
- **Multi-Dimensional User Preferences Representation**
  - Distance-based preference
  - Popularity-based preference
  - Preference-based preference
- **Venue Flow Network**
  - Captures the transitions of people between the venues

MPG Architecture
- Initial Query
- Input collection
- Rules of Interest
- Points of Interest
- Statistical Analysis
- Result visualization

Technologies:
- Java
- JQuery
- Foursquare
- GoogleMaps

MPG Interfaces
- The “Input” panel to formulate the query, and choose algorithms through the “Algorithms” menu.
- POIs are visualized on a map or a scatter-plot and a dashboard presents with corresponding analysis.

Motivation