

Location-aware Computing to Mobile Services Recommendation: Theory and Practice

Theme

In recent years, more and more geo-labelled data are available that benefit from advanced hardware (positioning systems, environmental sensors), software (standards, tools, network services) and the ever-growing mentality of sharing (crowdsourcing for geographic tagging). Based on human activities, many daily web/app services (Facebook, Tweeter, and Foursquare) generate data and traces that are often transparently annotated with location and contextual information. Such services make it easier to collect and combine rich and diverse information about locations. Exploiting geo-labelled data provides a tremendous potential to materially improve existing and offer novel types of recommendation services. Those recommendation services bring benefits for many domains, including social networks, marketing and tourism.

Many core challenges are involved to fully exploiting geo-labelled data. The main challenge is to combine ideas and techniques from various research communities, such as recommender systems, data management, geographic information systems, social network analytics, and text mining. Bringing together researchers and practitioners from these communities, this proposal aims at providing a platform for discussing in depth and collecting feedback about challenges, opportunities, novel techniques and applications. This proposal is about providing recommendation services over geo-labelled data, where locations are either part of the recommended object, or part of the recommendation process.

We solicit original contributions of **research** or **survey** papers addressing the following non-comprehensive list of topics:

Location-based social networks and advertising

- Recommendations for locations, events, venues, travel
- Friend and community suggestions
- Extracting preferences, tips, ratings, patterns, habits
- Modeling geo-social influence of users and locations
- Location-aware viral campaigns
- Proximity marketing over social networks

Geo-spatial humanities

- Historical geographical information systems
- Spatial-temporal social network analysis in the humanities
- Text geo-parsing and other NLP techniques for geographical text analysis

Tourism

- Social-group trip planning and recommendations
- Recommending travel destinations, hotels, routes, and points of interest
- Automatic guide and tour generation for social networks
- Exhibition arrangement

Location-aware recommender systems

- Location as context recommendation system
- Collaborative filtering vs. content-based recommendation system
- Case and empirical studies

Understanding location-based social networks

- User preference/mobility modeling and analysis
- User similarity computing based on locations
- Friend recommendation and community discovery
- Hot spots, significant places, and interesting locations detection
- Location prediction and location privacy

Notes for Authors

Contributions must be at least 12 pages in length. Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Conference papers may be submitted if the paper has been rewritten and expanded to at least 30% (proofs to be included in the cover letter), and, if appropriate, written permissions must have been obtained from any copyright holders of the original paper.

For preparation of your manuscript you may follow the instructions at <https://www.iospress.nl/journal/journal-of-ambient-intelligence-and-smart-environments/>, under section “Manuscript Submission & Author Instructions”.

Important Dates

Submission: 31 March 2020

Notification: 1 November 2020

Camera-ready: 1 December 2020

Scheduled publication: January 2021

All deadlines at 11:59pm PST.

Guest Editors

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