

## Accepted Manuscript

Special issue on context-aware mobile recommender systems

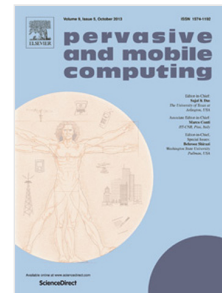
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## Preface

# Special Issue on Context-aware Mobile Recommender Systems

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Personalized recommendation systems are software tools and techniques providing suggestions for items to be of use to a user. They are considered to be a kind of both Information Retrieval (IR) system and Decision Support (DS) system providing personalized information recommendations. In fact, since the appearance of the first commercial Recommender System called "Tapestry" in 1992, Recommender Systems have proven effective in overcoming the challenges related to the incredible growth of the information on the Web. In such a context, Recommender Systems are especially valuable tools for non-experienced users facing decision-making processes as it is well-demonstrated by the increasingly common appearance of e-commerce Websites taking advantage of recommendation techniques.

Current advances in Mobile Computing research and wireless network technologies along with the proliferation of evermore powerful mobile devices such as smartphones and tablet computers has brought recommender systems to migrate to mobile platforms. In detail, beyond the possibility of access recommender systems at anytime and anywhere (ubiquity) as mobile applications, the diversification of the capabilities of mobile devices towards the concept of self-awareness has led built-in sensors such as geolocation, motion and environmental sensors (contextual data sources) to play a role in the development of mobile recommender systems.

The availability of location data from positioning systems such as Global Positioning System (GPS) and Global Navigation Satellite System (GLONASS) has become more and more common among mobile devices. Nowadays, location information could be the most exploited kind of contextual information among mobile applications. In the field of recommender systems, it is redefining the way physical shopping is performed, bringing notable opportunities to the leisure domain. These new opportunities are being leveraged by social networking services such as Foursquare, Swarm and Yelp to offer personalized recommendation services that help customers to make more informed decisions about, for example, where to eat, shop and relax.

The aim of this special issue in the *Pervasive and Mobile Computing* (PMC) journal is to explore the recent advances in the application of location-based recommendation solutions in different domains by soliciting original research contributions in the form of theoretical foundations, comparative analysis, descriptive surveys, experiments and case studies on context-aware mobile recommender systems.

For that purpose, several call for papers were distributed among the main mailing lists of the field for researchers to submit their works to the special issue. We received a total of 23 submissions which were subject to a rigorous review process to ensure their quality, authenticity, and relevance to the special issue.

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