Preface

User modelling and personalization are commonly used in multiple tasks, in which users are characterized only based on explicit information about their knowledge, behaviour, social relations or preferences, aiming at adapting generic systems to the particularities of each user. The ubiquitousness of social networking sites, and mobile and smart-devices offer new information sources, opportunities and challenges for changing the personalization paradigm. The analysis of these new data source offer new research opportunities across a wide variety of disciplines, including media and communication studies, linguistics, sociology, health, psychology, information and computer sciences, or education. This has important implications in the context of inclusive eGovernment and Smart Cities, which could leverage on the user's models to design and tailor services according to the characteristics and needs of each particular citizen. This would allow to mine and analyse user behaviour aiming at better understanding users (and ourselves), and thereby create more accurate models and personalisation strategies.

The opportunities for advanced research are match by several challenges. First, the knowledge discovery process, i.e. how data could be collected and interpreted. Second, the long-term availability of data, the interpretation of user-generated information, and the need for qualitative and quantitative (as well as user-based and content-based) research approaches. This also leads to ethical and legal considerations. Third, due to the heterogeneous nature of smart devices it is necessary to develop strategies for representing users and their behaviour. Fourth, the processing and management of high volumes of generated multidimensional personal data hinders effective and efficient data management. Fifth, the creation of long-term user models, which should capture the particularities of users across long periods of time, as well as coping and adapting to dynamic changes in life patterns. Finally, these models should be made available for multiple applications, for example, they could be integrated in real world health systems.

The workshop aimed to bring together experts from academia and industry to discuss the state-of-the-art, open problems, challenges and latest models, techniques and algorithms in the field of lifelong user modelling and personalization in the context of smart cities. Particularly, this workshop targeted people who are interesting in sensing/mining/understanding data generated by citizens (including but not limited to social media data and data generated with smart devices) that can derive personalization models as well as to tackle challenges in cities and help better formulate the future.

The workshop attracted a number of high-quality contributions of which four long papers were accepted for presentation at the workshop. These accepted papers span a variety of issues and techniques related to user modelling for recommendation and city transit solutions. Given the advances on ubiquitous computing, an additional position paper is included tackling the challenges and opportunities arising from the digital preservation of self-tracking data.

Additionally, the workshop included a invited talk: "Uncovering the Hidden Wisdom of Crowds in Smart Cities" by Dr. Chuanren Liu, from the Decision Sciences and MIS Department at Drexel University.

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