



1st International Workshop on *Personalisation and Decision Support for Citizen Service Enhancement at Scale* (IEEE Smart-PDS 2019)

<https://smart-pds.github.io/>

The 2019 IEEE Smart World Congress and the [3rd IEEE Conference on Smart City Innovations \(IEEE SCI 2019\)](#) will be held in **Leicester, United Kingdom**. IEEE SCI 2019 will include a highly selective program of technical papers, accompanied by workshops, demos, panel discussions and keynote presentations. Original contributions are welcome from both a technical and application perspective. The theme of the 2019 edition will be to investigate how Smart City Innovations can manage issues surrounding reliability in addition to considering how ideas and concepts can be deployed on a large scale.

The theme of the conference is “**Towards Reliable and Scalable Smart Cities**”

Workshop Overview

Decision making is a core activity in daily human lives. Despite its increasing importance to cope with various problems in the context of smart cities (such as planning, energy assessment, policy-making, etc.), decision making can sometimes become a daunting task due to e.g. the participation of large and diverse groups of stakeholders with conflicting opinions, or the presence of numerous decision criteria and humongous relevant data. Effective and highly scalable **Decision Support Systems** are thus on high demand in these settings. **Recommender Systems** (RecSys) are a widespread data-driven decision support paradigm to provide users with personalisation services, tailored products or relevant information based on analyzing - and learning from - data describing their preferences, profile, context, behavioural patterns, etc. Personalisation and decision support approaches are impacting our daily lives not only as customers but more generally as citizens, visitors, patients, etc. Adapting to the current and ever-changing context around citizens and visitors, and helping them make the right decisions amid numerous available options, provides an added value in improving their experience and helping them benefit from on-demand services. Example domains in these contexts include: (i) recommending free time activities or events, (ii) suggesting suitable touristic places to visit, (iii) assisting citizens with the *best* route between two locations, or (iv) encouraging their participation in government decision-making activities of their interest, to name a few.

This workshop aims at attracting demonstrations of novel research to tackle challenges faced in smart cities, with a particular focus on Big Data-driven user personalisation and large-scale decision-making problems. Research topics include applications, techniques and methods with or without case studies, related to personalisation applications of hybrid and context-aware recommender systems, solving the cold-start problem in smart city contexts, preference elicitation and its integration with Big Data, multi-criteria and group decision support systems at scale. Researchers and practitioners working in different fields are encouraged to submit their research contributions and ideas in addition to demonstrators and visual materials such as posters.

2019 IEEE Smart World Congress



Topics of Interest

This workshop covers contributions describing recent advances related to **personalisation, recommender systems, as well as data-driven and multi-criteria decision making approaches at large scale**, to improve citizen and visitor services in highly connected and data pervaded Smart City settings.

Particular topics of interest include (but are not limited to) the following:

- Smart city challenges and applications: e-governance, tourism, leisure, socialising, health and wellbeing, sustainable cities, participatory democracy, ... involving:
- Large-group decision making
- Multi-criteria decision analysis models
- User preference modelling and preference aggregation
- Context-aware recommender systems
- Group recommender systems
- AI/Machine Learning approaches for recommendation and decision support
- Big Data technologies in personalisation and decision support approaches
- Sensor data fusion and uncertainty handling
- Role of the IoT in personalisation and decision support services
- Ethical and legal aspects of data-driven personalisation and decision support

Instructions and paper submission

All papers should be of up to 6 pages including all figures, tables, and references. At most 2 additional pages with the pages overlength charge, may be allowed. Papers must be prepared according to the IEEE CPS format via [IEEE Manuscript Templates for Conference Proceedings](#). All accepted workshop papers will be included in the proceedings published by IEEE-CS Conference Publishing Services. The papers should be submitted through the [EasyChair conference management system](#). Authors of accepted papers, or at least one of them, are requested to register and present their work at the conference, otherwise their papers will be removed from the digital libraries of IEEE CS after the conference.

Important dates

Paper submission due: April 26, 2019

Notification of acceptance: May 10, 2019

Camera-ready papers due: May 19, 2019

Please inform us about your submission to our session with a tentative title by e-mail: ercan.ezin@bristol.ac.uk and i.palomares@bristol.ac.uk

Contact- Workshop Chairs

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