

CFP: LOD 2021 – Special Session on Data Science for Sustainable Cities (deadline postponed)

[Apologies if you receive multiple copies of this announcement.]

Special Session on Data Science for Sustainable Cities
@ 7th International Online & Onsite Conference on Machine Learning,
Optimization & Data Science (LOD 2021)
October 5–8, 2021
Grasmere, Lake District, England – UK
<https://lod2021.icas.cc/special-sessions/>

Conference post-proceedings: Springer–Nature Lecture Notes in
Computer Science (LNCS)

A selection of the best papers will be invited to submit an extended
version for publication on
Frontiers in Sustainable Cities – Data Analysis and Data–Driven
Modeling for Smart Cities
<https://www.frontiersin.org/research-topics/17634/data-analysis-and-data-driven-modeling-for-smart-cities>

We invite submissions of papers, abstracts, posters, talks and demos
on all topics related to the special session.

**** Important Dates ****

- * Paper Submission Deadline: ****Thursday April 29, 2021**** (Anywhere on Earth)
- * Abstract/Poster/Demo Submission Deadline: ****Sunday May 9, 2021**** (Anywhere on Earth)
- * Reviews Released to Authors: by Tuesday June 15, 2021
- * Rebuttal Due: by Tuesday June 22, 2021
- * Decision Notification to Authors: by Wednesday June 30, 2021
- * Camera Ready Submission Deadline: by Saturday July 10, 2021

**** Aims and Scope ****

The amount of data generated nowadays by society, city infrastructures, and digital technologies around us is astonishing. The analysis, modeling and knowledge extraction of/from these data is a key asset for understanding urban environments and improving the efficiency of urban mobility, air quality and other forms of sustainability. This special session provides a platform to share high-quality research ideas related to data science methods and technologies for urban environments, a topic of crucial importance for many Sustainable Development Goals (i.e., SDG 7 on Sustainable Energy and SDG 11 on Sustainable Cities and Communities). Another important goal is to establish a meeting point for researchers in

academia and industry who develop methodologies and technologies for data science, machine learning and artificial intelligence with specific applications in smart and sustainable cities.

**** Topics ****

- Data acquisition and data analysis in sustainable cities
- Data-driven predictive modeling for urban and built environments
- Time series analysis and forecasting for urban environments
- Anomaly detection for multivariate sensor data
- Robust machine learning and model verification
- ICT platforms for collecting, visualizing and analyzing data in urban environments
- Data analysis for mobility and transportation
- Data analysis for air quality monitoring
- Data analysis for heating management
- Data analysis for smart buildings and smart grids
- Model explainability and interpretability in urban applications
- Predictive modeling for district heating networks
- Predictive modeling for energy-efficient cities
- Innovative sensing platforms (e.g., mobile sensors) for data gathering
- Data gathering and management for citizen science in urban environments
- Data security, privacy and blockchain
- Analytics for municipalities and urban stakeholders
- Cloud and big data platforms
- Smart hospitals and healthcare for sustainable cities
- Data-driven modeling for urban complex systems
- Data analytics for emergency management
- Urban Analytics
- Information diffusion and social networks for sustainable cities
- Epidemic data analysis in urban environments
- City monitoring and Urban planning
- Senseable cities
- Analytics for smart growth and effective infrastructure

**** Post-proceedings of selected and revised papers ****

Conference post-proceedings: Springer-Nature Lecture Notes in Computer Science (LNCS)

**** Selection of best papers ****A selection of the best papers accepted to the special session will be invited to submit an extended version for publication in *Frontiers in Sustainable Cities*

Research Topic: Data Analysis and Data-Driven Modeling for Smart Cities

<https://www.frontiersin.org/research-topics/17634/data-analysis-and-data-driven-modeling-for-smart-cities>

**** Paper submission and format ****

All papers must be submitted using EasyChair.
Any questions regarding the submission process can be sent to
conference organizers: lod@icas.cc

Please prepare your paper in English using the Springer Nature –
Lecture Notes in Computer Science (LNCS) template, available on the
conference website. Papers must be submitted in PDF.

Types of Submission:

- long paper: original novel and unpublished work (max. 12 pages in Springer LNCS format);
- short paper: an extended abstract of novel work (max. 4 pages);
- work for oral presentation only (no page restriction; any format). For example, work already published elsewhere, which is relevant and which may solicit fruitful discussion at the conference;
- abstract for poster presentation only (max 2 pages; any format). The poster format for the presentation is A0 (118.9 cm high and 84.1 cm wide, respectively 46.8 x 33.1 inch). For research work which is relevant and which may solicit fruitful discussion at the conference.

Each paper submitted will be rigorously evaluated. The evaluation will ensure the high interest and expertise of reviewers. Following the tradition of LOD, we expect high-quality papers in terms of their scientific contribution, rigor, correctness, novelty, clarity, quality of presentation and reproducibility of experiments. Accepted papers must contain significant novel results. Results can be either theoretical or empirical. Results will be judged on the degree to which they have been objectively established and/or their potential for scientific and technological impact.

It is also possible to present the talk virtually (Zoom).

**** Special session organizers ****

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