DS2019: 22nd International Conference on Discovery Science

Radisson Blu Resort and Spa

Split, Croatia, October 28-30, 2019

Conference website	http://ds2019.irb.hr/
Submission link	https://easychair.org/conferences/?conf=ds_2019
Submission deadline	June 14, 2019

The 22nd International Conference on Discovery Science (DS 2019) provides an open forum for intensive discussions and exchange of new ideas among researchers working in the area of Discovery Science. The scope of the conference includes the development and analysis of methods for discovering scientific knowledge, coming from machine learning, data mining, intelligent data analysis, big data analysis as well as their application in various scientific domains.

We invite submissions of research papers addressing all aspects of discovery science: papers that focus on the analysis of different types of massive and complex data, including structured, spatio-temporal and network data. We would also like to encourage contributions from the areas of computational scientific discovery, mining scientific data, computational creativity and discovery informatics. We particularly welcome papers addressing applications from different domains of science including biomedicine and life sciences, astronomy, physics, chemistry, as well as social sciences. Applications to massive, heterogeneous, continuous or imprecise data sets are of particular interests. Possible topics include, but are not limited to:

- Knowledge discovery, machine learning and statistical methods
- Ubiquitous Knowledge Discovery
- Data Streams, Evolving Data and Models
- Change Detection and Model Maintenance
- Active Knowledge Discovery
- Learning from Text and web mining
- Information extraction from scientific literature
- Knowledge discovery from heterogeneous, unstructured and multimedia data
- Knowledge discovery in network and link data
- Knowledge discovery in social networks
- Data and knowledge visualization
- Spatial/Temporal Data
- Mining graphs and structured data
- Planning to Learn
- Knowledge Transfer
- Computational Creativity
- Human-machine interaction for knowledge discovery and management
- Evaluation of models and predictions in discovery setting
- Causality modeling

- Interpretability of machine learning and deep learning models
- AI frameworks for discovery in scientific domains
- Biomedical knowledge discovery, analysis of (multi)omics, micro-array, gene deletion, gene set enrichment data
- Machine Learning for High-Performance Computing, Grid and Cloud Computing
- Applications of the above techniques to other natural or social sciences

Important Dates

- **Paper submission: 14.6.2019**
- Author notification: 22.7.2019
- **PhD session abstract submission: 2.8.2019**
- PhD abstract notification: 9.8.2019
- Camera ready: 16.8.2019
- Author registration: 20.8.2019
- Early (non-author) registration: 30.8.2019
- Regular registration: 27.10.2019
- Conference: 28. - 30.10.2019

Submission Guidelines

Regular papers

Regular research papers may contain up to fifteen (15) pages and must be formatted according to the layout supplied by Springer-Verlag for the Lecture Notes in Computer Science series. The Program Committee reserves the right to offer acceptance as Short Papers (8 pages in the Proceedings) to some submissions. The reviews are single-blind. You do not need to anonymize your submission. Submitted papers may not have appeared in or be under consideration for another workshop, conference or a journal, nor may they be under review or submitted to another forum during the DS 2019 review process.

We encourage all authors to include their individual ORCID in their address information.

Submission deadline: **June 14, 2019**

Authors should submit their regular papers via our submission page through Easychair: https://easychair.org/conferences/?conf=ds_2019
Authors of accepted papers must submit along with the final version of their paper a [copyright form](#), filled and signed.

Authors of accepted papers are expected to register to the conference and present their work (see author registration date).

PhD abstracts

Discovery Science 2019 introduces a special PhD session to support the young generation in entering the scientific community of Discovery Science. The PhD session will provide an environment specifically for junior PhD students to exchange ideas and experiences with peers and to get in contact and get constructive feedback from senior discovery science researchers. We invite PhD students to submit four page extended abstracts for poster presentations to be presented in the PhD session. The abstracts should show preliminary research findings within the PhD theses, pertaining the topic is relevant for the Discovery Science conference.

When submitting, the authors will be able to list Discovery Science PC members they would like to get feedback from.

Submission deadline: **August 2, 2019**

The template and the submission site: to appear.

Publication

The proceedings of DS 2019 will appear in the Lecture Notes in Artificial Intelligence Series by Springer-Verlag. In addition, a special issue of Machine Learning journal (published by Springer) on Discovery Science in planned, where authors will be invited to submit extended versions of their work. Fast Track Processing will be used to have them reviewed and published.

Venue

The conference will be held in Radisson Blu Resort and Spa in Split, Croatia.

Split is a well-known cultural and historical center in Dalmatia, Croatia.

The conference will be held at The Radisson Blu Resort Split which is situated at the seashore, featuring a private beach, several pools and a spa, 252 guest rooms and suites, three restaurants, 8 meeting rooms and an elegant deck for outdoor gala events. It is equipped with free high-speed wireless internet.

The hotel is well connected to the historical city center (public bus, 35 min walk or 7 min by car) and its main attractions such as the medieval city center with the Roman Diocletian's Palace, restaurants, bars, and numerous touristic and historical sites.

Committees

General Chair

- Sašo Džeroski, Jožef Stefan Institute, Ljubljana, Slovenia

Program Chairs

- Tomislav Šmuc, Institut Ruđer Bošković, Zagreb, Croatia
- Petra Kralj Novak, Jožef Stefan Institute, Ljubljana, Slovenia

PhD Symposium Chair

- Tomislav Lipić, Institut Ruđer Bošković, Zagreb, Croatia

Contact

All questions about submissions should be emailed to the program chairs Petra Kralj Novak or Tomislav Šmuc.