

Workshop on Management of Data under Uncertainty (MoDU 2023)
To be held in conjunction with [ADBIS 2023](#)
September 4, 2023
Barcelona, Spain
Call For Papers
<https://modu2023.lis-lab.fr/>

GENERAL INFORMATION

In the era of big data and Machine learning, the issue of uncertainty, is still an active research topic. Uncertainty needs to be managed at various levels of data management process: data collection, data querying, machine learning and data analytics. For instance, the presence of uncertainty can be source of semantics errors during query evaluation. Moreover, traditional machine learning and deep learning models do not consider uncertainty in data and predictions while they are prone to noises. Then, quantifying uncertainty is a critical challenge for most machine learning techniques. From analytics perspective, the presence of uncertainty and imprecision can cause inaccuracies in predictions that may impact the quality of the data analytics procedures themselves.

GOAL OF THE WORKSHOP

The aim of the workshop is to allow academics and industrial from various areas to share their experiences on management of uncertain data. Authors are encouraged to submit their research work and case studies addressing all facets of uncertainty and showing the usefulness of their approaches in different application domains.

LIST OF TOPICS

We seek contributions covering all aspects of data management under uncertainty, including, but not limited to, the following topics:

Uncertainty in data collection and querying:

- Incompleteness, ambiguity, inconsistency in data
- Aleatoric and epistemic uncertainty
- Uncertainty Modeling
- Querying uncertain data
- Approximate query
- Uncertain data fusion

Uncertainty in ML and Deep learning models:

- Prediction models for uncertain data
- Uncertainty quantification in deep and machine learning
- Uncertainty in data labeling
- Reasoning under uncertainty
- Uncertain data and conformal approaches

Uncertainty in data analytics:

- Uncertainty and Imprecision in (big) data management and Analytics
- Uncertain Spatial Data Management
- Data mining on uncertain data

- Metrics for uncertainty and data quality
- Uncertainty quantification

SUBMISSION INSTRUCTIONS

Submissions should present original works not currently under review or published elsewhere. This workshop accepts research and industrial papers (regular: 12 pages max., and short: 6-8 pages max.) including novel approaches for management of uncertain data. All accepted papers will be published in the conference proceedings and will be submitted for inclusion. Papers should be submitted in PDF format using the [EasyChair](#) online submission system. Authors should consult Springer's authors' guidelines and use their proceedings templates, either for LaTeX or for Word, for the preparation of their papers.

IMPORTANT DATES

- Paper submission: April 24, 2023
- Notification of paper acceptance: May 15, 2023
- Camera-ready due: June 9, 2023
- Workshop day: September 4, 2023

WORKSHOP ORGANIZERS

- Richard Chbeir, Univ. Pau & Pays Adour, Anglet, France
- Allel Hadjali, Engineer School ENSMA, Poitiers, France
- Sana Sellami, Aix Marseille University, Marseille, France

PUBLICATION

The workshop papers will be published by Springer in Communications in Computer and Information Science (CCIS). The authors of selected workshop papers will be invited to submit an extended version of their contributions to a special issue of a well-established and ranked international journal (tbd).