CALL FOR PAPERS — SUM 2019

The 13th International Conference on Scalable Uncertainty Management

December 16-18, 2019
Compiègne, France

http://sum2019.hds.utc.fr/

The thirteenth international conference on Scalable Uncertainty Management (SUM 2019) will be held in Compiègne (France), on December 16-18, 2019. The SUM conferences are annual events which gather researchers interested in dealing with imperfect information, in a wide range of fields such as artificial intelligence, databases, information retrieval, machine learning, and risk analysis, with the aim of fostering collaboration and cross-fertilization of ideas from different communities. An originality of the SUM conferences is the care for dedicating a large space to tutorials about a wide range of topics related to uncertainty management.

Topics of interest

The scope of the conference covers a wide range of topics related to the management of large amounts of information, in particular information of a complex kind, uncertain, incomplete, or inconsistent. We are particularly interested in papers that focus on bridging gaps, for instance between different communities, between numerical and symbolic approaches, or between theory and practice.

Topics of interest notably include (but are not limited to):

- **Imperfect information in artificial intelligence & machine learning**
  relational learning, graphical models, probabilistic inference • approximate, similarity-based or analogical reasoning • planning under uncertainty, reasoning about actions, spatial and temporal reasoning • argumentation, defeasible reasoning, belief revision • imprecise probabilities, belief functions, possibility theory • incomplete preference specifications • weighted logics

- **Imperfect information in databases**
  modeling, indexing, and querying uncertain databases • top-k queries, skyline query processing, and ranking • approximate, fuzzy query processing • uncertainty in data integration and exchange • uncertainty and imprecision in geographic information systems • probabilistic and/or possibilistic database models • data provenance and trust • data summarization

- **Imperfect information retrieval, data mining & the semantic web**
  uncertainty in description logics and logic programming • approximate schema and ontology matching • information extraction, text mining, knowledge-base construction • learning to rank, personalization, and user preferences • combining vector-space models with symbolic representations • inductive logic programming and reasoning • probabilistic language models

- **Risk analysis**
  aleatory vs. epistemic uncertainty • uncertainty elicitation methods • uncertainty propagation methods • decision analysis methods • tools for synthesizing results
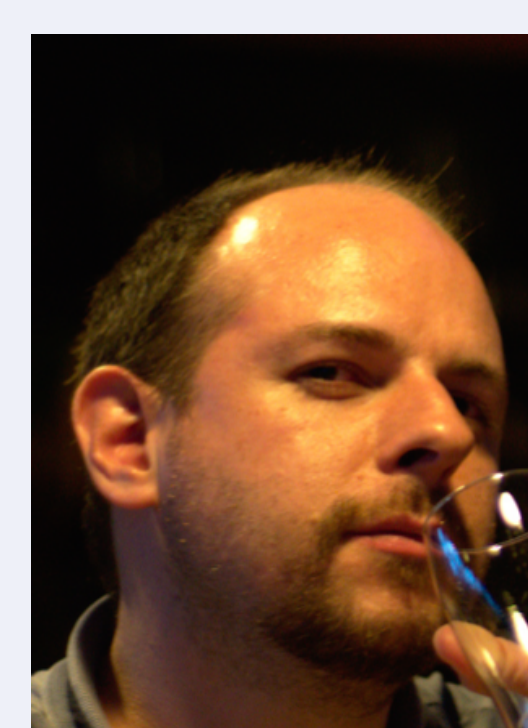
General chair

- Benjamin Quost, Université de Technologie de Compiègne, France
  benjamin.quost@utc.fr

Program Committee chairs

- Nahla Ben Amor, LARODEC – Institut Supérieur de Gestion, Tunisia
  nahla.benamor@gmx.fr

- Martin Theobald, University of Luxembourg, Luxembourg
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Keynote speakers

Cassio P. de Campos
Eindhoven University of Technology, NL

"Scalable reliable machine learning using sum-product networks"

Jérôme Lang
CNRS, Paris, France

"Computational Social Choice" (provisional title)

Wolfgang Gatterbauer
Northeastern University, Boston, USA

"Algebraic approximations of the probability of Boolean functions" (provisional title)

Important dates

- June 30th, 2019: submission deadline
- Sept. 22nd, 2019: notification of acceptance
- Oct. 6th, 2019: camera-ready copies

Location and venue

The conference will be held in the "Daniel Thomas" Innovation Center of the Université de Technologie de Compiègne.

Compiègne is situated approximately 80km north of Paris, and can be reached by train from this latter.

More information

Please feel free to visit the website (http://sum2019.hds.utc.fr) or to contact us by e-mail.

We are looking forward to welcome you in Compiègne !