Workshop proposal – ADBIS 2019

Workshop title:
1st international workshop on Qualitative Aspects of User-Centered Analytics (QAUCA'19)

Estimated length
1/2 day

Chairs

- Nicolas Labroche, University of Tours
- Patrick Marcel, University of Tours
- Veronika Peralta, University of Tours

Short bio of the workshop PC chairs
Nicolas Labroche's research pertains to the development of user-centric data mining approaches such as semi-supervised soft (fuzzy or evidential) clustering algorithms, user profiling by stream clustering of usage data, or the definition of short-term and long-term user intents for recommender systems. On-going work focuses on the modelling of user subjective interestingness for data exploration. He is a member of committees and reviewer for conferences (DOLAP, FuzzIEEE, EDBT, PAKDD, EGC) and journals (Computational Intelligence, Fuzzy Sets and Systems, IJUFKS) related to these topics. He has actively participated in the organization of several events like the recent data journalism workshop at conference CORIA/TAL 2018 or the eBISS summer School 2016.

Patrick Marcel is an active researcher in the field of OLAP and user-centered techniques (including personalization and recommendation). He has participated in the committees of conferences and journals connected to these topics (including DKE, VLDB, EDBT, DOLAP, DaWaK), is a member of the steering committee of the DOLAP workshop, was guest editors of special issues of journals (IS, IJDWM) and has organized the French EDA workshop in 2013, the eBISS summer school in 2016 and the international DOLAP workshop in 2017.

Verónika Peralta is an active researcher in the field of information quality and user-centered techniques (including personalization, recommendation). She has participated in the committees of conferences and journals connected to these topics (e.g., IS, JDIQ, IJBIS, DEXA, DOLAP, ICIQ) and was guess editor of a special issue of the the IJDWM journal. She participated to the organization of EDA 2013, CIAA 2011 and eBISS summer school in 2016.

Short description of the workshop objectives and rationale
Interactive analytics, often called Interactive Data Analysis (IDA) in the literature, is an interactive, iterative process in which a user issues an analysis action over potentially big datasets, receives a result set, and decides if and which action to issue next, with the ultimate goal of answering an informational need not necessarily well defined initially. IDA has attracted a lot of attention recently, as it is a difficult and tedious process, especially for inexperienced users, where targets may not be well defined and little is known about the structure and content of the sources. In particular, users are expected to undergo on their own what is often considered as a complex lifecycle: identify and collect sources, clean and transform them, etc. up to the interactive exploration by means of querying, on the fly building of Machine Learning models, etc.
We note that other forums, like the HILDA and ExploreDB workshops, both co-located with the SIGMOD conference, as well as the IDEA workshop co-located with KDD, address the aspects of human in the loop analysis (HILDA), the interactive exploration of databases (ExploreDB), or the development of data mining techniques that allow users to interactively explore their data (IDEA). The QAUCA workshop originally ambitions to gather researchers and practitioners around topics pertaining to the user-centered aspects of IDA, with a particular focus on the **qualitative aspect** of the interactive analytic process and the **support of inexperienced users**.

A special issue of a journal (e.g., DKE) will be organized on this topic, and the best papers of the workshop will be invited to submit an extension of the work presented during the workshop to this special issue.

List of PC members

- Julien Aligon, University of Toulouse
- Ladjel Bellatreche, ENSMA Poitiers
- Jérôme Darmont, University of Lyon
- Matteo Golfarelli, University of Bologna
- Magdalini Eirinaki, San Jose State University
- Lorena Etcheverry, University of Montevideo
- Zoubida Kedad, Versailles Saint-Quentin University
- Natalija Kozmina, University of Latvia
- Nicolas Labroche, University of Tours
- Marie Jeanne Lesot, Sorbonne University
- Patrick Marcel, University of Tours
- Adriana Marotta, University of Montevideo
- Christophe Marsala, Sorbonne University
- Elsa Negre, Paris Dauphine University
- Veronika Peralta, University of Tours
- Franck Ravat, University of Toulouse
- Samira Si-said, CNAM University
- Panos Vassiliadis, University of Ioannina
- Gilles Venturini, University of Tours
- Alejandro Vaisman, Buenos Aires Institue of Technology

The persons in the list above come from different fields of research (database and data warehousing, data quality, data mining, artificial intelligence) and have all agreed to participate in the PC of the workshop. More will be contacted.

List of topics covered by the workshop

- Quality aspects of interactive analysis: measuring exploration outcome, end-user experience, fairness, trust, transparency of data analysis, assessing subjective interestingness, benchmarking interactive analytics, etc.
- Facilitating analytics for the non data scientists: data journalists, decision makers, data enthusiasts, etc.
- Real life applications of user-centered analytics, case studies, etc.
- Models and language for user-centered analytics.
- User-centered methods and techniques for improving analytics through visualization, recommendation, reformulation, approximate query-answering, personalization, result presentation, data storytelling, etc.
- Integration of analytics with machine learning, data mining, information retrieval, search engines, etc.