
Call for Papers

Discrete Applied Mathematics

Special Issue: Concept Lattices and Their Applications

Formal Concept Analysis (FCA) is a general-scope method for data analysis and classification with mathematical roots in order and lattice theory. Its originality lies in the extraction of concepts in data, which have a dual definition with a set of properties/predicates and a set of objects that satisfy the properties. These concepts are organized in conceptual structures that may range from partial orders to lattices of special types and that comprise data dependencies. Due to the richness of its structures, FCA contributes to several domains including artificial intelligence, data mining, information retrieval, knowledge management, data and knowledge engineering, logic, algebra, and lattice theory. The research in the domain is very active and many applications are proposed in such various fields as natural language processing, life and social sciences, image processing, and software engineering, where large datasets are present.

The International Conference on Concept Lattices and Their Applications (CLA) is one of the most important events of the FCA community (<http://cla.inf.upol.cz/>). It aims to provide a forum for researchers involved in all aspects of the study of FCA, from theory and methodology to tools and practical applications. In 2016, the event was organized and hosted by the National Research University Higher School of Economics, Moscow, Russia.

We hereby cordially invite authors of CLA 2016 publications as well as other FCA researchers to contribute to this special issue of *Discrete Applied Mathematics*. Submissions should relate to the themes of the conference, including but not restricted to:

- foundations
- concept lattices and related structures
- attribute implications and data dependencies
- algorithms
- visualization
- data preprocessing
- redundancy and dimensionality reduction
- information retrieval
- classification
- clustering
- association rules and other data dependencies
- ontologies
- applications

This is an open call; submissions of contributions not presented at CLA 2016 are also welcome. Contributions arising from papers given at the conference should be substantially extended, and should cite the conference paper where appropriate. All articles will be thoroughly refereed according to the high standards of *Discrete Applied Mathematics*.

The full papers must be submitted through the Elsevier Editorial System (<http://ees.elsevier.com/dam>). When submitting your paper, be sure to specify that the paper is a contribution for the Special Issue of **CLA 2016**, so that your paper is assigned to the guest

editors. Please see the Author Instructions on the site if you have not yet submitted a paper through this web-based system. Be sure to select the article type **S.I.: CLA 2016**.

The deadline for submission is **September 15, 2017**.

Accepted papers will be published online individually, before print publication.

We are looking forward to receiving your contribution.

The Guest Editors,

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