.: Call for Papers :.

JIMIS – Journal of Interdisciplinary Methodologies and Issues in Science

Special Issue on

Graphs & Social Systems

Scope of the special issue

A social system can be viewed as the set of interrelationships existing between entities such as individuals, groups, and institutions and forming a structured, coherent whole. Social system analysis is an inherently interdisciplinary academic field, which emerged from social psychology, sociology, statistics, graph theory, and other domains. For the last few decades, and in parallel with the development of the *network science* field, graph-based approaches dedicated to this purpose have gained a significant following in social sciences and humanities and there are now tools commonly available for end-users.

Thanks to the very generic nature of graphs, it is possible to take a method designed to handle a specific system, and apply it in a completely different context. For instance, a method allowing to detect functionally important proteins in a biological network can be used to identify key-players in a social network. However, due to lexical, methodological and cultural differences, being aware of the methods developed in other fields can be truly challenging for a researcher.

The goal of this special issue is to try to bridge this gap, by exposing researchers to different tools and usages of the concept of graph, coming from out of their field. The general idea is to describe graph analysis methods and/or their application to specific social systems. We are interested in works proposing new analysis or extraction methods, likely to be used in various very different applicative contexts. We are also interested in works describing how an existing method, initially developed for a given context, was adapted and/or applied to graphs representing completely different systems. Finally, we are interested as well in works dealing with systems whose unique properties require the design of domain-specific methods.

Topics of the special issue

For the **applicative side**, all domains related to the representation or study of social relationships and interactions are concerned:

- anthropology
- arts
- communication
- economics
- education
- geography
- history
- law
- linguistics
- literature
- organizational studies
- political science
- psychology
- social psychology
- sociolinguistics
- sociology
- urban studies

and others.

The **methodological aspects** of interest include, but are not limited to:

- Community detection, graph clustering
- Node centrality, key-player identification
- Analysis of other topological measures and properties
- Modeling and/or control of diffusion processes
- Notion of balance in signed graphs
- Definition of generative models
- Extraction of graphs from raw data (text, logs, measures...)
- Processing of enhanced graphs: directed, weighted, signed, spatial, multilayer, dynamic...
- Modeling and simulation of social processes

About the journal

Since January 2016, JIMIS is an international open-access peer-reviewed journal covering cross-disciplinary topics. It uses the Creative Commons license and is free for both authors and readers. Each issue is handled by guest editors and dedicated to a specific topic. The strongly interdisciplinary nature of the journal is enforced by gathering in one issue articles from Humanities and Social Sciences, and articles from Exact and Experimental Sciences. Papers co-signed by authors from different disciplines are very much welcome, but not mandatory.

Located off the beaten track, JIMIS has a wide and original scope. The goal of each issue is to emphasize a variety of points of view on a common cross-disciplinary topic. JIMIS aims at publishing high quality papers that would not find their place in traditional disciplinary journals, due to their strong connection with other scientific fields. For instance: tackling a problem which is multidisciplinary in nature, exposing alternative points of views coming from other fields, or transposing methods from one field to another.

Along with several other international journals, JIMIS is published under the aegis of Épisciences (http://episciences.org/), an offspring of the CNRS (French national center for scientific research http://www.cnrs.fr/). The steering committee of JIMIS is constituted of recognized international scientists representing a number of domains (http://jimis.episciences.org/page/comites). Each paper is reviewed by several reviewers in a single blind process.

Submission Notes

For the abstract submission, the authors must send a one page PDF file by email to Vincent Labatut (see deadline below).

For the full paper, the authors must follow the submission process and guidelines of the journal (http://jimis.episciences.org/page/auteurs). In particular, note the submission process takes place on the Épisciences platform and involves uploading the article on HAL (https://hal.archives-ouvertes.fr/) or arXiv (http://arxiv.org/). LaTeX, MS Word and OpenOffice templates are provided on the journal website (with a preference for LaTeX).

Submitted articles must not have been previously published or currently submitted for conference/journal publication elsewhere. If the article is an extension of a previous paper, please cite it in the submitted article, explicitly describe the new contributions and explain how they are significant.

Important Dates

Abstract submission deadline: ~~1 May 2016~~ **29 May 2016** (1 page max)
Paper submission deadline: 4 September 2016
First round of reviews: 6 November 2016
Intended publication date: first semester of 2017

Editors

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