COSIT2017

13th International Conference on Spatial Information Theory
L'Aquila, Italy, September 4-8 2017

3rd CALL FOR PAPERS

Paper submission deadline extended to March 10, 2017 and
1st call for Doctoral Colloquium Contributions

Established in 1993, COSIT (Conference On Spatial Information Theory) is a biennial international conference series concerned with theoretical aspects of space and spatial information. COSIT was started to establish a counterpoint to several concurrent applied GIS conferences at which reports on applications and development in GIS technology were made but often without a contribution to scientific theory and literature. The focus at COSIT from the beginning has been on theories of space and time relevant to the establishment and the advancement of (geo)spatial information science.

Spatial information theory is concerned with all aspects of space and spatial environments as experienced, represented and elaborated by humans, other animals and artificial agents. The scope of the conference includes both the conceptualization of frameworks for specific spatio-temporal domains, as well as the development of general theories of space and time and theories of spatial and temporal information.

Papers may address aspects of spatial information from any disciplinary perspective including (but not limited to) the following:

- Cognitive Science, Vision Science, Environmental and Behavioral Psychology
- Geography and Geographic Information Science
- Computer Science and Artificial Intelligence
- Engineering, Human Factors and Cognitive Ergonomics
- Cognitive Robotics and Cognitive Informatics
- Mathematics, Logic, Philosophy and Ontology
- Cognitive Anthropology, Psycholinguistics and Linguistics
- Architecture, Planning, and Environmental Design

FORMAT

COSIT 2017, the thirteenth conference in the series, will be held in L'Aquila, Italy, on September 4th-8th 2017. September 4th will be dedicated to satellite workshops and tutorials and September 7th will host a doctoral forum. The main conference is a three-day event, taking place from September 5th to September 7th. Two types of scientific contributions are going to be invited: Full Papers and Posters.

CONFERENCE TOPICS

The following (non-exclusive) topics are indicative of the fields of interest:
- activity-based models of spatial knowledge
- cartography and geographic visualization
- cognitive structure of spatial knowledge
- cognitive aspects of geographic information
- cooperative work with spatial information
- events and processes in geographic space and time
- human sensors in space and time
- incomplete or imprecise spatial knowledge
- knowledge representation for space and time
- languages of spatial relations
- naive geography/behavioral geography
- navigation and wayfinding, including robot navigation
- ontology of space and time
- presentation and communication of spatial information
- qualitative and commonsense spatial representation
- quality issues in geographic information
- semantics of geographic information
- social and cultural organization of space
- spatial and temporal language
- spatial aspects of social networks
- spatial data integration/interoperability
- spatial decision-support
- structure of geographic information
- theory and practice of spatial and temporal reasoning
- time in geographic information
- user-interface design/spatialization of interfaces
- virtual spaces
- volunteered geographic information

FULL PAPERS

Starting from this edition, COSIT proceedings will be published in Open Access within the Leibniz International Proceedings in Informatics (LIPIcs) Series (http://www.dagstuhl.de/en/publications/lipics).

Full papers will be thoroughly reviewed by at least three members of the international program committee. High-quality submissions will be accepted for presentation at the conference and published in the conference proceedings.
Selection will be based on relevance to the conference, scientific significance, novelty, relation to previously published literature, clarity of presentation, and interdisciplinary context. Manuscripts must describe original work that has neither been published before, nor is currently under review elsewhere. Papers must be written in English according to LIPIcs formatting guidelines (available at the URL http://www.dagstuhl.de/publikationen/lipics/anleitung-fuer-autoren/) and should not exceed 13 pages (including title, figures, and references). Full papers must be submitted in PDF format through the COSIT 2017 EasyChair installation, available at the URL https://easychair.org/conferences/?conf=cosit2017.

POSTERS

Posters are intended for presenting to the community those pieces of work that are not yet mature for a full publication. For example, on-going work, project reports, preliminary ideas, and small applications. Accepted poster submissions will be published in a separate volume in the Springer series Lecture Notes in Geoinformation and Cartography (http://www.springer.com/series/7418), alongside the workshop proceedings. Poster content shall be summarized in a two-pages abstract, written in English, and prepared using either the Springer Word Document Template or the Springer Latex Document Template (contributed books): https://www.springer.com/gp/authors-editors/book-authors-editors/manuscript-preparation/5636. Poster contributions must be submitted in PDF format via email at poster@cosit2017.org. Poster submissions will be screened for acceptance by COSIT 2017's Program Committee. Accepted submissions will be presented in parallel at the conference within a dedicated poster session.

DOCTORAL COLLOQUIUM (DC)

COSIT 2017 Doctoral Colloquium will take place on the last day of the conference and provides PhD students the opportunity to present their relevant research to international and interdisciplinary researchers and fellow students to gain important feedback. Students are encouraged to apply who are at any stage of their PhD from the early stages all the way to nearing completion. Typically, presentation topics are related to a PhD student's doctoral dissertation research, but any

research topic appropriate for COSIT may be presented, as long as the student is the primary author of the work.

Students are required to submit a brief summary of their work (no more than **1500 words** in PDF format), along with a brief biography (no more than **300 words** in plain text format) to doctoral@cosit2017.org. The summary should be prepared using the Springer LNG&C Template (contributed books), either for Word or Latex: https://www.springer.com/gp/authors-editors/book-authors-editors/manuscript-preparation/5636. We suggest the following approximate structure for the summary:

- Abstract (optional, max 100 words)
- Background
- Research Question
- Approach/Method
- Expected/Actual Outcomes
- Further work
- References

The biography should outline the academic background and research interests of the doctoral student submitting the abstract, and should indicate the current stage of the student's PhD. The biographies and summaries will be distributed at the conference.

Space permitting, all graduates who meet the deadline, format, and topic requirements will be invited to participate and give a brief oral presentation of their work. If the number of submissions exceeds the time available, the summaries will be screened by the COSIT Chairs for acceptance. The selection process will be based on the usual criteria of originality, scientific importance and relevance to the COSIT themes.

IMPORTANT DATES

- Full papers due..........................March 10, 2017
- Full paper notification..................April 25, 2017
- Full paper camera-ready due..............May 15, 2017

- Posters due..............................May 15, 2017
- Posters notification.....................June 1, 2017
- Posters camera-ready due.................June 15, 2017

- DC summaries due.........................May 22, 2017
- DC notification of acceptance............June 5, 2017

ORGANIZATION

General Chairs:
        Eliseo Clementini (University of L'Aquila)
        Maureen Donnelly (SUNY Buffalo)

Program Chairs:
        May Yuan (UT Dallas)
        Christian Kray (University of Muenster)

Workshop and Tutorial Chairs:
        Paolo Fogliaroni (TU Wien)
        Andrea Ballatore (Birkbeck, University of London)

INFO & CONTACT

All necessary information about the scientific program, deadlines, local organization and logistics will be provided on COSIT 2017 website (http://www.cosit2017.org) in a timely manner as we approach the conference date.

Yet, for any type of information, concerning either the scientific program or local organization, please feel free to email our organizing team at info@cosit2017.org.