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Special Issue on: Distributed & mobile spatial computing

Guest editors:

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scope

Ubiquitous wireless sensor networks and mobile processing devices combined with novel distributed computing architectures are enabling a new range of spatial applications. Most of the information generated by these distributed systems and applications is spatially referenced. Managing, processing, and using this geospatial information presents significant new research challenges in distributed and mobile information systems. Distributed and mobile geospatial technologies have important implications across many application domains, including transportation, tracking, navigation, active environments reacting to a mobile user's context, sustainable management of natural environments, and emergency preparedness and response.

dgsum'07

This special issue aims to provide a compendium of the state-of-the-art in research on distributed & mobile spatial computing. It follows on from the recent workshop on 'distributed geoinformatics and sensing, ubiquity, and mobility' (dgsum'07, www.geosensor.net/dgsum), held in conjunction with COSIT'07 and supported by ISSNIP (ARC Network on Intelligent Sensors, Sensor Networks and Information Processing, <http://www.ee.unimelb.edu.au/ISSNIP>) and ISPRS (<http://www.isprs.org>). Although it is intended primarily as an outlet for the publication of full papers arising from this workshop, the special issue is open to all researchers working in the field. We aim to publish research articles covering a range of aspects of the field, including but not limited to:

topics

- Data structures and algorithms for distributed geoinformation processing in mobile ad-hoc networks & geosensor networks
- Innovative and emerging applications of distributed & mobile spatial computing
- Applications of distributed & mobile spatial computing in environmental monitoring and management, transportation, safety and security, and emergency preparedness and response
- Embedding spatial intelligence in active, natural and built environment
- Localization and tracking in mobile ad-hoc networks & geosensor network
- Querying and data mining for distributed geoinformation systems
- Qualitative spatial reasoning in distributed geoinformation processing
- Uncertainty and redundancy in ubiquitous environments and geosensor networks.

submission

We invite full research journal articles. Articles must be in digital format and must conform to standard CEUS guidelines for authors.

All papers will go through the normal peer review process.

NEW!!! - extended deadline for submissions is: 15 February 2008.

Submissions should be made using the journal's own online submission system. <http://ees.elsevier.com/ceus/default.asp>. Register, login and submit a new manuscript. Please be sure to select 'Special issue:dgsum'07/distrMoSpatComp' from the 'Choose Article Type'-pull down menu.

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dgsum'07

ISSNIP/ISPRS joint international workshop on distributed geoinformatics and sensing, ubiquity, and mobility