QUeST 2009

Call for Papers
1st SIGSPATIAL ACM GIS International Workshop on Querying and Mining Uncertain Spatio-Temporal Data

November 3, 2009, Seattle, WA, USA

http://www.dbs.ifi.lmu.de/~berneck/quest/

Querying and mining uncertain data has received a lot of attention from the research community in recent years due to the enormous increase of geographically referenced data occasioned by developments in IT, digital mapping and remote sensing. The global expansion of Geo Information Systems emphasizes the importance of developing data driven inductive approaches to geographical analysis and modeling. An important problem is that collected data often is inherently imprecise and may contain incomplete, inaccurate or outdated information. Such data arises particular in dynamic environments. Traditional querying and mining approaches are often inapplicable or may extract misleading or plain wrong information when applied to uncertain data.

Therefore, modern data management solutions coping with uncertain data are very important for numerous spatio-temporal applications such as location-based services. The incorporation of the uncertainty of spatio-temporal data increases the quality of query results. However, new problems arise, such as higher computational complexity and the need for proper representation of probabilistic query results. Thus novel querying methods are required.

Querying and mining uncertain spatio-temporal data requires joint effort from multiple research communities. The aim of this workshop is to provide a unique forum for discussing in depth the challenges, opportunities, techniques and applications on the topic of coping with uncertainty in spatial, temporal and spatio-temporal domains.

Topics of interest include, but are not limited to the following aspects:

- Models for uncertain spatial, temporal and spatio-temporal data
- Managing uncertain spatial, temporal and spatio-temporal data
- Querying uncertain spatial, temporal and spatio-temporal data
- Probabilistic spatial query processing
- Probabilistic stream processing
- Probabilistic similarity search
- Indexing uncertain data
- Mining uncertain spatial, temporal and spatio-temporal data
- Probabilistic spatio-temporal pattern mining
- Managing uncertain data from sensor networks
- Location-based service based on uncertain information
- Privacy preserving and security in spatial and spatio-temporal domains
- Traffic monitoring and prediction

Submission Instructions:

We welcome submissions of both technical papers and vision/position papers. We have two categories of papers and presentations:

- Full research paper: up to 8 pages (20 min. talk)
- Short technical or vision paper: up to 4 pages (5-10 min. talk)

Authors are invited to submit full, original, unpublished research papers that are not being considered for publication in any other forum. Manuscripts should be submitted in PDF format and formatted using the ACM camera-ready templates available at:

http://www.acm.org/sigs/pubs/proceed/template.html

Papers must be electronically submitted in PDF format at the following address:

http://www.easychair.org/conferences/?conf=quest09

Authors of accepted papers must guarantee that their paper will be presented at the workshop.

Important Dates:

Paper submissions due:	September 4, 2009
Notification to the authors:	September 28, 2009
Camera ready papers due:	October 9, 2009
ACM GIS 2009 Conference:	November 4-6, 2009
QUeST Workshop:	November 3, 2009

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