RICH-VGI: enRICHment of volunteered geographic information (VGI)



Techniques, practices and current state of knowledge

Workshop @ the 18th AGILE Conference on Geographic Information Science

Lisboa, Portugal.

Tuesday 9 June 2015.

In recent years we have witnessed the rapid emergence of Volunteered Geographical Information (VGI) projects. VGI is being applied more and more for research and applications. Nevertheless, VGI is often denounced due to its heterogeneities in quality, completeness and redundancy. However, these can be improved by applying spatial analysis and data mining techniques. These approaches utilize the relationship between the data from a VGI platform itself and/or cross-utilization of data from other sources, including other VGI platforms or authoritative sources. The purpose of this workshop is to intensively discuss the possibilities of data derivation, knowledge propagation and quality improvement for VGI and VGI analysis.

Examples of topics of particular interest include:

- Enrichment and quality assessment of VGI
- Techniques of matching data sets from different VGI platforms
- Techniques and applications of generating 3D terrain and 3D buildings from VGI
- Enrichment of attributive information for VGI
- Improvement of data quality and quantity from VGI by standardization of data structures
- Innovative data mining and data fusion algorithms adaptable for VGI
- Enhanced VGI analytics that relies upon different data sources (both authoritative and non-authoritative)
- Enrichment and assessment of VGI considering the needs of particular application domains (e.g. environment, routing, disaster management, urban planning, etc.)
- and other similar topics

We invite several different kinds of contributions: full research papers presenting new work in the indicated areas, technical applications and case studies, as well as innovative insights.

Objectives

The objective of this workshop is to provide an interdisciplinary forum towards determining techniques and ideas for improving VGI in order to derive further information from it for

different use cases and VGI analysis. These techniques and ideas include several aspects of data quality, such as completeness, attributes, locational accuracy, metadata, etc.

The workshop shall encourage:

- Discussions and exchange of research experiences, approaches, and algorithms for enriching VGI data,
- Understanding the state of the art in the area of VGI enrichment,
- Identifying current knowledge gaps which will help us to clearly outline some short-term and long-term VGI enrichment research goals and themes.

The workshop will be a full day workshop. The workshop will include keynote speeches, a number of oral presentations in three sessions, a session of technical demonstration and a session of panel discussion.

Further Information will be posted on the Workshop Website:

http://www.geog.uni-heidelberg.de/gis/rich-vgi.html

Organizing Committee

Dr. Hongchao Fan Dr. Jamal Jokar Arsanjani

Dr. Peter Mooney Prof. Dr. João Porto de Albuquerque

Prof. Dr. Alexander Zipf

Programm Committee To be announced

Call for Papers

We invite submissions of short papers (maximum 2,000 words) according to <u>AGILE formatting guidelines</u> (Springer templates). The papers will be published online. In addition to this we shall pursue the potential for the publication of a special issue in an appropriate international journal.

Please send the manuscripts as word or pdf to richvgi@geog.uni-heidelberg.de

Deadlines

Submission of short Paper: April 07 2015

Notification of Acceptance and Review feedback: May 04 2015

Revised Version of Paper for Publication on WebSite: June 01 2015

Workshop date: June 09 2015