# VGI Knowledge Portal

Rob Lemmens, Alessia Calafiore, Gilles Falquet







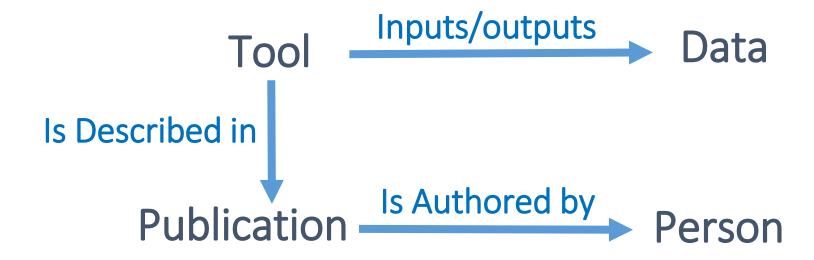
# ENERGIC objective: Build a Repository

.. establish an open and updatable repository of VGI analysis, integration tools, methods and case studies ..



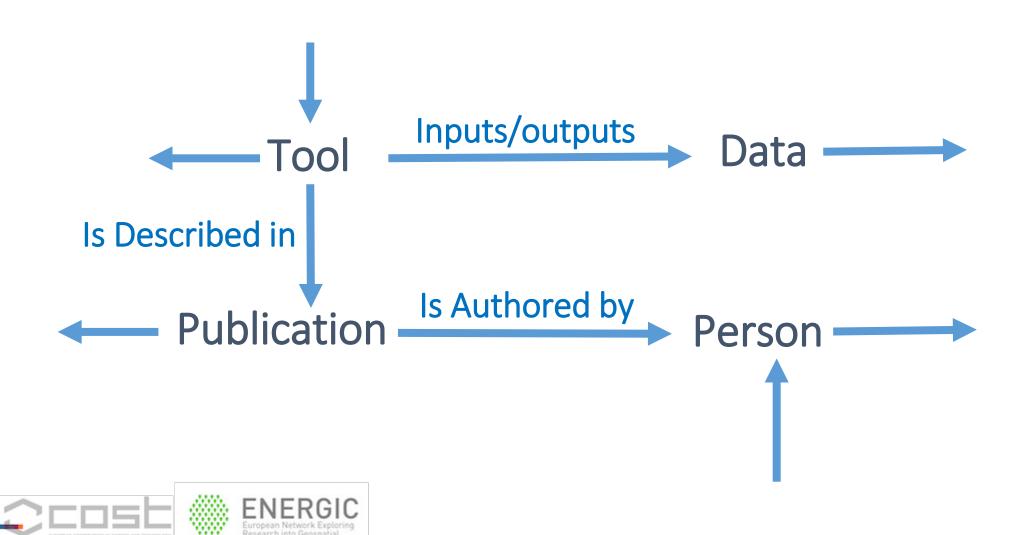


# Repository -> VGI Knowledge Portal

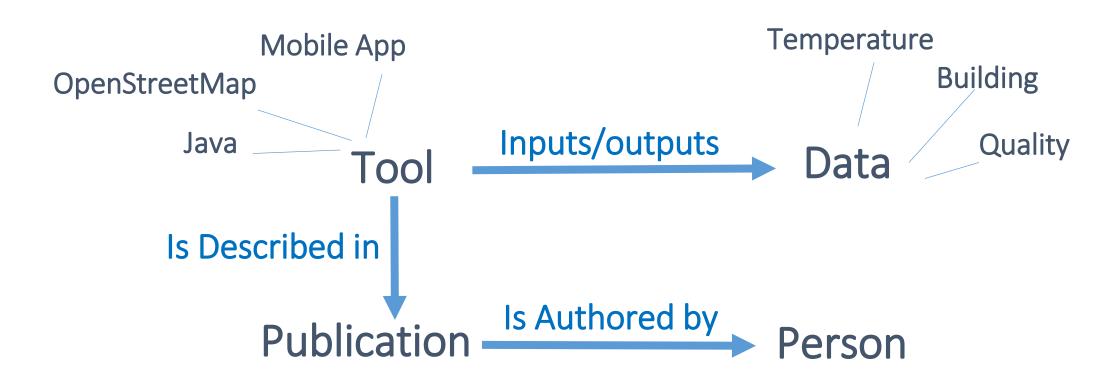




# Repository -> VGI Knowledge Portal

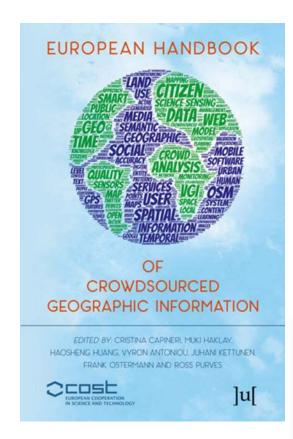


# Repository -> VGI Knowledge Portal





# ENERGIC VGI Ontology Cleaned keyword list



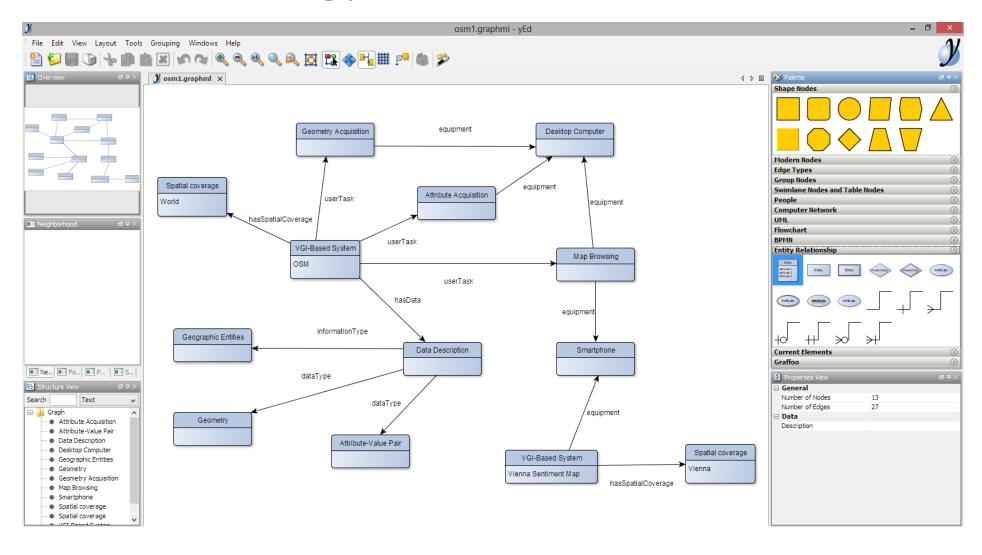
					communicating
					communication
				giscience	community
			urban	walking	community
					community-oriented
		positional	accuracy	and	completeness
				data	completeness
					completeness
					completeness
					complexity
	inherent	spatial	and	temporal	component
					computers
			collaborative	cloud	computing
				cloud	computing
					concepts
				shared	conceptualization
					conceptualizations
		temporally	accurate	road	conditions
rious environ	ments, which might not r	necessary be caused by or	towards these environmer	nts. In the	confid en ce
llowing, we ex	xtend existing research, a	and illustrate how social me	edia data can be harnessed	d to extract	confidentiality
eople's affecti	ve responses to environn	nents. Particularly, we focu	s on <mark>geotagged photos</mark> in	Flickr.	connection
				ive ique. ork	connections
or extracting a	connections				
ntiment analy	ysis (or <mark>opinion mining)</mark> is	s a <mark>natural language proces</mark>	sing (NLP) technique, and	aims to d-sourcing	conrmation
	uthor's attitudes, opinion	ns or sentiments with respe	ect to the topic written abo	out.	consciously
		for contimont analysis am	ang which levicon-hased m	nethod is	consensusproducing
	ods have been proposed t	ioi sentiment analysis, and	ong willen lexicon basea ii		
fferent metho		ased sentiment analysis, and			consistency
ifferent metho					





# **ENERGIC VGI Ontology**

# Instantiation in Lisbon with yEd graph editor



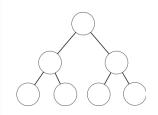




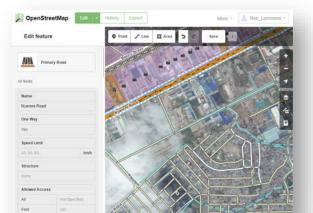
## Semantic enrichment with ENERGIC VGI ontology

Classes

Active Sensing Task Activity Algorithm Analysis Actor Analyst Annotations Application Article Assesment Automated Tagging Book Chapter Book Characterization Claim Collaborative Human-Computer Analytical Activity Comparison Contributor Daily Activity Data Data acquisition **Dataset Analysis** Data description Data Mining Algorithm Data quality Data source Data type Decision or Policy Making Definition Description Discourse Element Education Emergency management End user task Experimentation Geographic Feature Description Geographic Information Example Folksonomy Geographical Accuracy Geographical Object Geographical precision Geometry Acquisition Georef Image Georef Structured Georef Text GeoreferencedData GeoSpatial Entity Government Agency Individual Actor Information Hardware Human Activity Human sensor Hypothesis In-situ sensor Knowledge Resource Mapping Activity Institution or Agency Machine Learning Mapping Measurement Accuracy Method Methodology Mobile application Mountain Municipality Monitoriing National Mapping Agency Navigation NonGeoreferenced Data Ontology Passive Task Pedestrian Navigation Positional Accuracy Precision Processina Project Quervina



### VGI system: OpenStreetMap



### Is of Type

### sessment of VGI for the purpose of

### A conceptual model for quality assessment of VGI for the purpose of flood management

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VGI publication

#### Abstract

Volunteered Geographic Information (VGI) has emerged as a potential source of geographic information for different domains. Despite the many advantages associated with it, such information lacks of quality assurance, since it is provided by individuals with different motivations and backgrounds. In response to this, several methods have been proposed to assess the quality of volunteegographic information of different platforms. However, there has been little investigation aimed at explaining how cross-platform data could be used for quality





## VGI Knowledge Portal – Built with Semantic MediaWiki

### Welcome to the VGI Knowledge Portal [edit]

This Portal portal is a V manageme are connect Top categories of the **VGI Domain** are: Data, Tool, Project, Method, Person, Publication, Organization, Event.

Top categories of the **VGI Domain** are: Data, Tool, Project, Method, Person, Publication, Organization, Event.

Click here for important instructions to edit the Portal and to update it.

To start create or edit pages click here. Please, do not use commas in the page name.

If you want to know more about the portal contact us: vgiknowledgeportal@gmail.com













# VGI Knowledge Portal – Explore!

VGI Knowledge Portal Menu 

Search Search 

Category

Actions

Publication

From VGI Knowledge Portal

This category uses the form Publication. Social Networks VGI: Twitter Sentiment Analysis of Social Hotspots (Dario Stojanovski, Ivan Chorbev, Ivica Dimitrovski and Gjorgji Madjarov), Capineri, C et al. 2016. European Handbook of Crowdsourced Geographic Information. London: Ubiquity Press. DOI: http://dx.doi.org/10.5334/bax

### Pages in category "Publication"

The following 98 pages are in this category, out of 98 total.

11

· "Young Citizen Scientists" - Poster

#### А

- A framework for citizen science and monitoring environment—performance and quality.
- A Hybrid Method for Toponym Recognition
- · A hybrid system to support glacier monitoring activities on Italian Alps
- A Linguistic approach to Assess the Quality of Volunteer Geographic Information for Citizen Science
- A review of volunteered geographic information quality assessment methods
- A simple tag categorization framework using spatial coverage to discover geospatial semantics
- · Acquisition and Cartographic Applications of Subjective Geodata
- AffectRoute Considering people's affective responses to environments for enhancing route planning services
- Alpine Glaciology: an historical collaboration between volunteers and scientists and the challenge presented by an integrated approach
- An automated GRASS-based procedure to assess the geometrical accuracy of the OpenStreetMap Paris road network

#### L

- Linear mixed modelling with imputation Finnish
- Linked Data and ontology development for the semantic enrichment of volunteered geo-information

#### Μ

- Machine Learning Assists the Classification of Reports by Citizens on Disease-Carrying Mosquitoes
- Magazine "Vesitalous" + several COST action articles translated to Finnish 2/2016
- Mapping Flickr
- · Measures and indicators of VGI quality: An Overview
- Mobile crowd-sensing in the Smart City
- Moving on Twitter: Using Episodic Hotspot and Drift Analysis to Detect and Characterise Spatial Trajectories

#### Ν

- National environment monitoring is changing rapidly in Finland. abstract
- Not just a tool. Using context in the development of a mobile App for rural water supply in Tanzania
- Novel Tools for Water Quality Monitoring From Field to Laboratory. Novel





# VGI Knowledge Portal – Contribute Pages & Attributes!

VGI Knowledge Portal

Menu 🔻

## Usability of VGI for validation of land cover maps

Related Tool

Related Project

Related Data

Related Method

Keywords

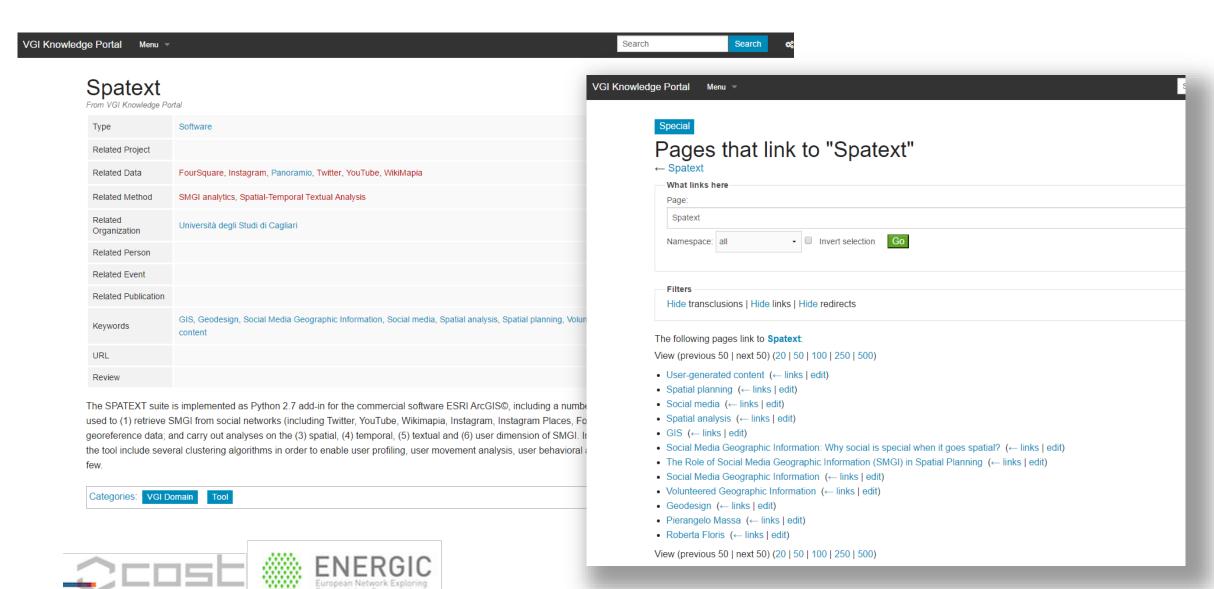
	Туре	Article
	Authors	Cidália Costa Fonte, Lucy Bastin, Linda See, Giles Foody, Flavio Lupia
	Related Tool	Geo-Wiki, OpenStreetMap
	Related Project	
	Related Data	Flickr, Panoramio, OpenStreetMap
	Related Method	
	Keywords	VGI, Land Use/Cover Map, Quality, Validation, Crowdsourcing
	Published in	International Journal of Geographical Information Science
	Year	2015
	Url	ttp//http://www.tandfonline.com/doi/full/10.1080/13658816.2015.1018266▲
	Review	

Volunteered Geographic Information (VGI) represents a growing source of potentially valuable data for many applicar still an emerging field and many different approaches can be used to take value from VGI, but also many pros and co

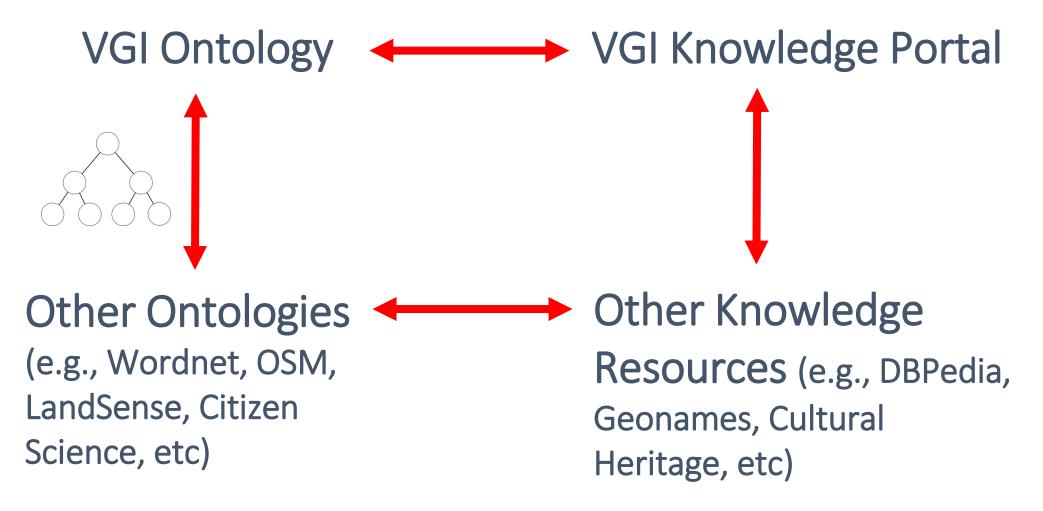




# VGI Knowledge Portal – Using the semantic links



## Linked data — as it should be







# http://vgibox.eu/repository



Working Groups The Action

Activiti

Resources Col

cultural comments & hu

View

Repository

Publications

Books

Reports

Photos

Videos

### COST Action IC1203

New: COST ENERGIC Datathon Challenge

As part of its on-going activities to investigate the benefits of VGI and geosocial media, COST ENERGIC has now started a datathon challenge that anyone can accept. All submissions (deadline: 31.07.2016) will be assessed, an two members of the winning team are invited to participate in the final COST Energic meeting in London! For details, please see http://vgibox.eu/activities/datathon-challenge/.

European Network Exploring Research Geospatial Information Crowdsourcing: software and methodologies for harnessing geographic information from the crowd (ENERGIC)

New and unprecedented sources of geographic information have recently become available in the form of usergenerated Web content. The integration and application of

these sources, often termed volunteered geographic information (VGI), offers multidisciplinary scientists an



observations for contex Embed





# Be on the VGI Knowledge Portal

To edit, ask for an account, send your email address to:

vgiknowledgeportal@gmail.com

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Alessia Calafiore <u>alessia.calafiore@unito.it</u>
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