# **Special Issue**

# Unlocking the Power of Geospatial Data: Semantic Information Extraction, Ontology Engineering, and Deep Learning for Knowledge Discovery

# Message from the Guest Editors

Over recent years, there has been a tremendous increase in digital information resources, including a significant amount of semi-structured data, such as XML files and metadata records, as well as unstructured data, such as scientific reports, news articles, social media, and historical archives. These data include a wealth of information about places, events, phenomena, geospatial concepts, and relations. Semantic information extraction aims to make this information explicit, enabling computer systems to make sense of the content and facilitate knowledge discovery and organization. Semantic analysis and visualization approaches play a significant role in further discovering immanent aspects of these data. Lately, deep learning algorithms have been used to automatically extract patterns and relationships from large amounts of data, including unstructured and semi-structured data. By combining deep learning approaches with semantic web techniques, such as ontologies and linked data, more powerful and effective intelligent systems can be developed that can reason over large-scale knowledge bases and perform complex tasks.

### **Guest Editors**

Prof. Dr. Christos Chalkias

Prof. Dr. Marinos Kavouras

Dr. Margarita Kokla

Prof. Dr. Mara Nikolaidou

### Deadline for manuscript submissions

closed (30 September 2024)



# ISPRS International Journal of Geo-Information

an Open Access Journal Published by MDPI

Impact Factor 2.8 CiteScore 7.2



#### mdpi.com/si/168093

ISPRS International Journal of Geo-Information Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 iigi@mdbi.com

mdpi.com/journal/ ijgi





# ISPRS International Journal of Geo-Information

an Open Access Journal Published by MDPI

Impact Factor 2.8 CiteScore 7.2



# **About the Journal**

## Message from the Editor-in-Chief

The ISPRS International Journal of Geo-Information invites you to submit research articles, reviews, and reports covering topics of the whole domain of geo-information. Although the journal was only founded in 2012, it has already achieved wide recognition in the scientific community. We are proud that since April 2015, our journal is indexed by the SCIE of the Web of Science. As Editor-in-Chief, I encourage you to consider IJGI for your scientific papers and would be pleased to welcome you as authors.

### Editor-in-Chief

## Prof. Dr. Wolfgang Kainz

Cartography and Geographic Information Science, Department of Geography and Regional Research, University of Vienna, Universitätsstr. 7, A-1010 Vienna, Austria

## **Author Benefits**

### **Open Access:**

free for readers, with article processing charges (APC) paid by authors or their institutions.

### **High Visibility:**

indexed within Scopus, SCIE (Web of Science), GeoRef, PubAg, dblp, Astrophysics Data System, Inspec, and other databases.

## **Journal Rank:**

JCR - Q2 (Geography, Physical) / CiteScore - Q1 (Earth and Planetary Sciences (miscellaneous))

