

## Special Issue

# Geospatial Big Data and Machine Learning Opportunities and Prospects

### Message from the Guest Editors

The increasing availability of large, dynamic data sets creates tremendous opportunities and challenges for empirical science. As an editorial in *Nature* pointed out, “Big Data” is relevant not only because it is big, but it is also complex. Further, the growth in Big Data has been accompanied by new computational methods that include the use of “machine learning” methodologies to process and make sense of such large datasets. Machine learning algorithms can be applied to geospatial Big Data for a variety of reasons, including enhancing our understanding of causal dynamics in systems, capturing those processes, and predicting system states. Better integration of geospatial Big Data with machine learning algorithms presents opportunities to scale geospatial data analysis over larger geographic extents, represent dynamic system behaviors in near real-time, and use model predictions to anticipate and control networked devices and sensors.

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### Guest Editors

Dr. Raja Sengupta

Department of Geography and School of Environment, McGill University, 805 Sherbrooke St W., Montreal, QC H3A 0B9, Canada

Dr. Liliana Perez

Laboratory of Environmental Geosimulation (LEDGE), Department of Geography, Université de Montréal, 1375 Ave. Thérèse-Lavoie-Roux, Montreal, QC H2V 0B3, Canada

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### Deadline for manuscript submissions

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijgi@mdpi.com](mailto:ijgi@mdpi.com)

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### 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

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