Special Issue on
Optimization Algorithms and Methods for Geomatics

CALL FOR PAPERS

Optimization is a special form of mathematical problems posed to find a design solution that provides the optimized design objective whilst meeting design constraints. Geomatics, on the other hand, is one of the most quickly developing techniques recently. New survey instruments have been developed and are being studied by researchers and final users: Very High Resolution Satellite Imagery, Terrestrial and Aerial Laser Scanning, Mobile Mapping Systems and, lastly, high precision drone surveys whose agricultural application has been considered one of the top ten most developing techniques of 2014 by Massachusetts Institute of Technology. New survey operative procedures and data analysis methodologies have to be tuned and optimized to be correctly applied to civil and environmental engineering as well as risk assessment and high precision agriculture. Only, as an example, the most modern algorithm, as structure from motion (SFM) utilized to extract semiautomatically three-dimensional models from drone imagery as well as from terrestrial acquisition, have to be optimized to assess accurate and robust results.

The objective of this special issue is to present original research and review articles related to integration of optimization of Geomatics and Geomatics techniques for optimization.

Potential topics include, but are not limited to:

- ▶ Optimization and automatic planning of image acquisitions for accurate and robust photogrammetric modelling (as SFM and MVS algorithms)
- ▶ Implementation of complex algorithms such as fuzzy logic for optimizing complex tasks connected to land management (i.e., waste management)
- ▶ Geomatics' procedures and methodology to optimize the safety of critical tasks in civil engineering (i.e., tunnelling)
- ▶ Optimization of quick damage assessment and management of emergency scenarios
- ▶ Optimization of GPS/GNSS procedures and algorithm
- ▶ Geomatics for optimization of logistic issues

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/jopti/oamg/.

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