

# INFOR: Information Systems and Operational Research

## Call for Papers

*Special Issue on the occasion of the 15th EUROPT Workshop on Advances in Continuous Optimization, July 12-14, 2017, Montreal, Canada*

### **Continuous Optimization and Applications in Machine Learning and Data Analytics**

On the occasion of the 15th EUROPT Workshop on Advances in Continuous Optimization, the first edition of this workshop to be held in Canada, *INFOR: Information Systems and Operational Research*, the journal of the Canadian Operations Research Society, will publish a peer-reviewed special issue entitled “*Continuous Optimization and Applications in Machine Learning and Data Analytics*”. *INFOR* is published by Taylor & Francis and is included in the ISI Web of Science (now Clarivate Analytics).

Theory and methods for continuous optimization and their application to practical problems continue to be of great value to practitioners. In particular, recent developments and advances in machine learning and data analytics have motivated new research in continuous optimization. The aim of this special issue is to disseminate some of the best work in this area. We are especially eager to receive submissions based on research presented at the 15th EUROPT Workshop.

We invite papers that address the following topics, individually or in combination:

- Advances of continuous optimization for machine learning and data analytics
- Use of machine learning for the hyperparameters optimization of algorithms
- Hybrid methods in continuous optimization and machine learning
- Linear and nonlinear local optimization
- Large-scale optimization
- Multi-objective optimization
- Mixed integer nonlinear optimization
- Robust optimization
- Derivative-free optimization
- Convex and non-smooth optimization
- Complexity and efficiency of optimization algorithms
- Semi-infinite programming
- Global optimization
- Stochastic optimization
- Complementarity and variational problems
- Conic optimization and semi-definite programming
- Analysis and engineering of optimization algorithms
- Optimal control and dynamic programming
- Optimization in data mining
- Optimization in industry, business and finance
- Applications in machine learning and data analytics

#### **Deadlines:**

- Deadline for Full Paper Submission: 1/31/2018
- Notification of 1<sup>st</sup> Review Outcome: 6/30/2018
- Expected Publication: 12/31/2018

Only **original manuscripts** will be considered for publication in this special issue of *INFOR*.

- Papers for consideration should be submitted via the [Editorial Manager Submission site \(http://www.edmgr.com/tinf/\)](http://www.edmgr.com/tinf/): Please indicate a special-issue submission when you upload your paper.
- All submissions will be refereed according to the usual standards of INFOR. Information about the journal, including author guidelines and other special issues in progress, is available at <http://www.tandfonline.com/loi/tinf20>. Additional information about the special issue can be obtained from the guest editors.

### **Special Issue Editors**

Please direct any inquiries, including the suitability of the work, to the Special-Issue Guest Editors:

1. Miguel F. Anjos ([miguel-f.anjos@polymtl.ca](mailto:miguel-f.anjos@polymtl.ca))
2. Fabian Bastin ([bastin@iro.umontreal.ca](mailto:bastin@iro.umontreal.ca))
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