ersa
60° Congress
Bolzano Bozen

Territorial Futures
Visions and scenarios for a resilient Europe

24>27 - 08 | 2021
BOLZANO | BOZEN
ITALY

Special Session Proposal

Machine Learning solutions in regional science

Katarzyna Kopczewska, University of Warsaw, Faculty of Economic Science

Abstract

Machine learning becomes present in all scientific disciplines. It works as a part of big data and artificial intelligence tasks, but it can be also applied in standard small-data modelling, by supplementing econometrics and statistics. Machine learning, as a new quantitative method, gives the chance to put new research questions and get new knowledge from data. It opens the path for progress in regional science.

Session is to collect different perspectives and applications of machine learning in regional science. Papers based on geo-referenced data, which use and/or develop unsupervised learning (clustering with k-means, PAM, CLARA, density-clustering, dimensions reduction with spatial PCA etc.) and supervised learning (modelling as Random Forest, Support Vector Machines, k-Nearest Neighbours, Artificial Neural Networks etc.) are welcome. Big data problems and solutions are invited. Sessions are to discuss challenges, available solutions and interesting implementations.