

Forecasting the Short-Term Energy Consumption Using Random Forests and Gradient Boosting

Friday 5 November 2021 17:00 (20 minutes)

This paper comparatively analyzes the performance of two machine learning algorithms (i.e. Random Forests and Gradient Boosting) in the field of forecasting the energy consumption based on historical data. The two algorithms are applied in order to forecast the energy consumption individually, and then combined together by using a Weighted Average Ensemble Method. The comparison among the achieved experimental results proves that the Weighted Average Ensemble Method provides more accurate results than each of the two algorithms applied alone.

Authors: Dr CHIFU, Emil Stefan (Technical University of Cluj-Napoca); Mrs CORDEA, Corina (Technical University of Cluj-Napoca); Dr CHIFU, Viorica Rozina (Technical University of Cluj-Napoca); Dr POP, Cristina Bianca (Technical University of Cluj-Napoca); Mr BARSAN, Octav (Technical University of Cluj-Napoca)

Presenters: Dr CHIFU, Emil Stefan (Technical University of Cluj-Napoca); Dr CHIFU, Viorica Rozina (Technical University of Cluj-Napoca); Dr POP, Cristina Bianca (Technical University of Cluj-Napoca)

Session Classification: Technologies for Future Internet

Track Classification: Technologies for Future Internet