Human in the loop through visual data mining
and interactive machine learning

Lydia BOUDJELOUD-ASSALA

Université de Lorraine, CNRS, LORIA, Metz, France

I will present a review of my research on cooperative approaches combining interactive visualization methods and automatic methods (Clustering, Biclustering, interpretable feature extraction, …) for the knowledge discovery in massive and temporal data. I will present different possibilities to involve the user in the data mining and machine learning process in order to improve his confidence and understanding in the models or obtained results. New challenges for these methods, which must be able to handle not only increasing amounts of data but also data that can change over time, will also be presented and discussed.