

End-to-End Machine Learning Project

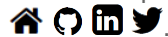
An end-to-end machine learning methodological approach to answer the stated problem, using a family of supervised learning algorithms in the framework of binary classification.

We are particularly interested in the following algorithms: (1) penalty regression (Lasso and its variants), (2) support vector machines (SVM), (3) decision trees (4) random forests and (5) ensemble methods.

Mentor



Dr. Mokhtar Z. Alaya is an Assistant Professor in LMAC laboratory UTC. He received his PhD in Statistics Machine Learning from Sorbonne University, University Pierre and Marie Curie in 2016. His research interest includes data science, machine learning, optimal transport, high-dimensional statistics, statistical learning theory, matrix completion. For more details about Mokhtar's research areas you can visit:



Student Profile

Master or final undergraduate in computer science, signal image processing and/or applied mathematics/ statistics.

Subjects

Modeling aspect of the studied problem, particularly the presentation of the models of algorithms (empirical risk, choice of loss function, optimization methods, etc.)

Implementing algorithms and conducting experiments on a real data set from UCI-ML repository.

Comparing the performance of algorithms and interpreting the results.