MYDATAMODELS
The Automated Machine Learning Company

MyDataModels (MDM) is a Côte d'Azur-based Deep Tech start-up based in Sophia Antipolis that emerged from the Université Côte d'Azur's innovation programme founded in 2018. MDM was created to develop a technology capable of automatically producing very high performance transparent predictive models. After nearly five years of self-funded research and development, MDM has created the Zoetrope Genetic Programming (ZGP) evolutionary supervised algorithm.

PROPOSED STUDY :

Explicable unsupervised clustering

with mixed data on small data

This subject aims at building a robust and transparent unsupervised strategy in a context of small data (thousands of observations). This strategy needs to construct homogenous clusters, explains the main differences between clusters and explains the clusters themself as simply as possible.

We will provide 3 tabular real datasets in three different domains:

-supply chain

-marketing

-banking customer segmentation

Rules:

- **Any type of strategies could be applied (Hierarchical clustering, K-means, DBscan, etc) only if a minimum number of parameters is provided (e.g., K, number of classes).**
- **The process needs to be as automatic and replicable as possible.**
- **The minimum number of raw features used to construct the clusters the better.**
- **The clustering can be done on transformed features, but the explications of the clusters need to be as close as raw features as possible.**