

# **On the combination of Clustering and Multi-Objective Approaches**

This proposal regards two relevant themes of Artificial Intelligence and Optimization Research: clustering and multi-objective optimization.

Multi-objective optimization problems have a significant relevance in many applications of various fields, such as engineering, management, statistics, space exploration, etc...On the other side, clustering is one of the most extensively studied problems in unsupervised learning, as highlighted by various surveys and books.

Many research streams have flourished around these topics for the last 25 years. Then, inspired by previous works on these topics, we are interesting in developing possible approaches in which clustering and multi-objective optimization can be combined.