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P-49: MAJARI PLATFORM: BRINGING MACHINE LEARNING TOOLS CLOSER TO THE SCIENTIFIC COMMUNITY

Nowadays, rigorous and in-depth data analysis has become a necessity for young researchers across various fields. The ability to discern patterns and draw meaningful conclusions from data can significantly enhance the impact of their research. The MAJARI project, an acronym for Machine Learning Approaches for Joint Analysis on Randomized clinical trials data In young pediatric cancer survivors, exemplifies this approach. This project focuses on analyzing a dataset derived from a multicenter controlled trial involving 116 young cancer survivors, aged between 6 and 18 years. The trial implements a physical exercise intervention, divided into intervention and control subgroups. The primary objective of the analysis is to identify patterns in physical activity levels, movement behaviors, and their impact on the psychological well-being of the participants.

Complementing this, the MAJARI Platform, currently in its development, deployment, and improvement stages, serves as a comprehensive web platform. It provides the necessary tools for data analysis using Machine Learning algorithms. Currently, it offers tools for Exploratory Data Analysis (EDA) and Machine Learning algorithms for regression, classification, and prediction. These include linear regression, Random Forest (RF), Principal Component Analysis (PCA), Local Interpretable Model-Agnostic Explanations (LIME), Density-Based Spatial Clustering of Applications with Noise (DBSCAN), K-Nearest Neighbors (kNN), ANalysis Of VAriance (ANOVA), and Analysis of covariance (ANCOVA). The MAJARI Platform aims to be user-friendly, enabling more rigorous data analysis by the entire scientific-academic community.

This work has received funding partly from the Plan Propio de Investigación de la Universidad de Granada (PPJIB2023-073) and partly from the Spanish Ministry of Universities (FPU grant number: 20/02621).