

The Large Enriched Germanium Experiment for Neutrinoless $\beta\beta$ (LEGEND) searches for instances of the hypothetical neutrinoless $\beta\beta$ decay with the aid of a large configuration of ^{76}Ge detectors. Due to the amount and nature of the data obtained from LEGEND, different approaches to data cleaning are taken. Traditional data cleaning procedures remove non-physical events from a dataset by performing cuts based on a chosen parameter. The goal of a machine learning approach is to reduce the sacrifice of physics events, in large datasets with different kinds of events, as well as automating the data cleaning process. The project focuses on visualizing the machine learning-based data cleaning process, achieved through an Affinity Propagation and Support Vector Machine (AP-SVM) approach. The high-dimensional nature of this approach proves impossible to immediately recognize if the dataset has been adequately cleaned. This challenge is overcome through a t-SNE algorithm which reduces the dimensionality of the resulting dataset to three, in order to train an SVM, which is rendered in voxels. The 3-D visualization represented by voxels provides greater insight on the effects of the AP-SVM approach for data cleaning, as opposed to a 2-D representation of the process.