* Initial Design Ideas

The final goal of the project is to analyze datasets and automatically suggest the best machine learning tools by using our machine learning analyzer. The analyzer is construct by a dataset Decision-Tree.

The Short-term goal is to classify dataset into three broad categories: Supervised Learning, Unsupervised Learning and Semi-supervised Learning according to whether there is output data in the dataset. After that, give a suggestion of machine learning tools directly by not using any analyzer. The team decide to provide 17 machine learning tools: Multiclass Neural Network, Linear Regression, Random Forest Regression, Sum Regression, Logistic Regression, Neural Network, NB or Sum, Anti-learning, Self-Organizing Map, K-means Clustering, Principle Component Analysis, Forced Clustering, Self-Training, Deep Learning, Recurrent Neural Network, Time Delay Neural Network and Feature Selection Principal Component Analysis. The best suitable tool would be suggested among these machine learning tools by using decision algorithm.

The website will provide the most suitable machine learning tool for each dataset uploaded by client. Besides, the website will analyze the dataset by using the best machine learning tool and visualize the output.