



HEART DISEASE PREDICTION

AUTHORS

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INTRODUCTION

We will use the Cleveland Heart Disease dataset from the UCI Machine Learning Repository. This dataset contains medical information about patients, including their age, sex, cholesterol level, resting blood pressure, maximum heart rate achieved, and whether or not they have heart disease.

OBJECTIVE

We will build a model that predicts the likelihood of a patient having heart disease based on their medical history and demographic information.

We will start with unsupervised clustering to group similar patients together based on their medical history.

Then, we will use this clustering information to assign labels to each patient and convert the data into a supervised format.

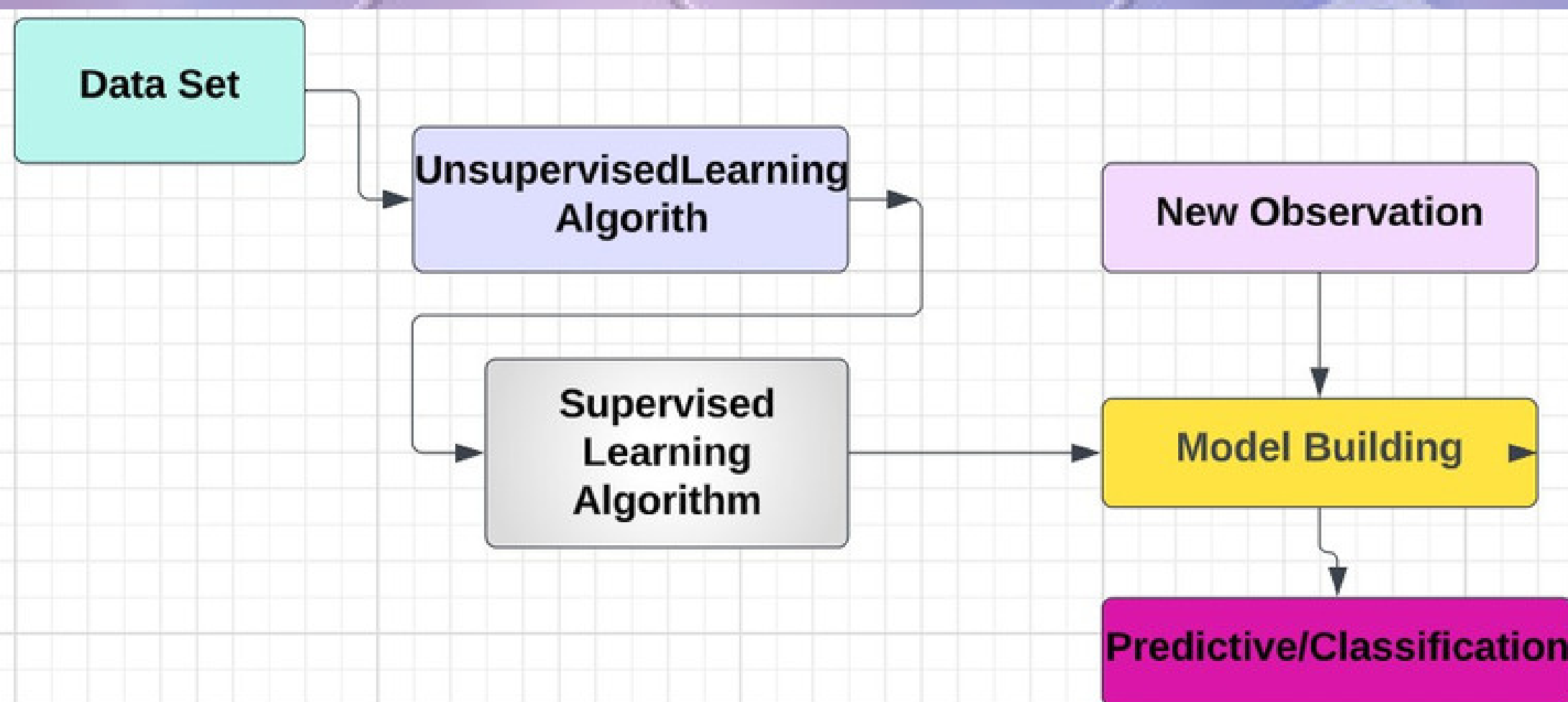
Finally, we will train a supervised learning model to predict the likelihood of heart disease.

RELATED LITERATURE

The heart disease dataset is a widely studied dataset that contains information about patients with heart disease. The dataset has been used in many studies to develop predictive models that can help diagnose and treat heart disease.

One study conducted by K. Sathya et al. (2020) aimed to develop a predictive model for heart disease using machine learning techniques. The researchers used the heart disease dataset to train and test their model, which achieved an accuracy of 90.37%.

MODEL ARCHITECTURE

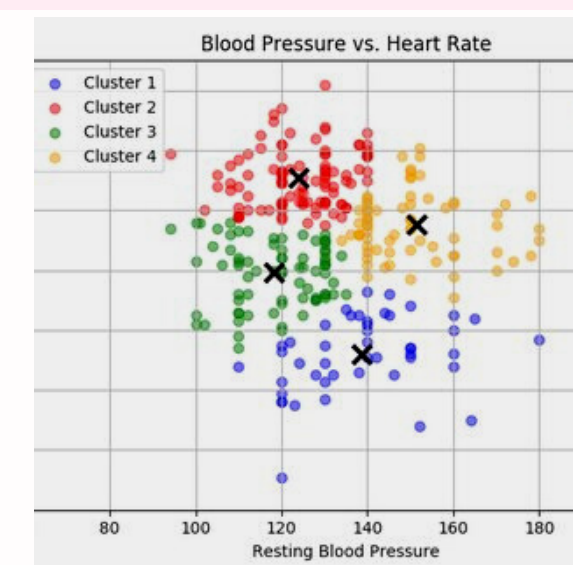
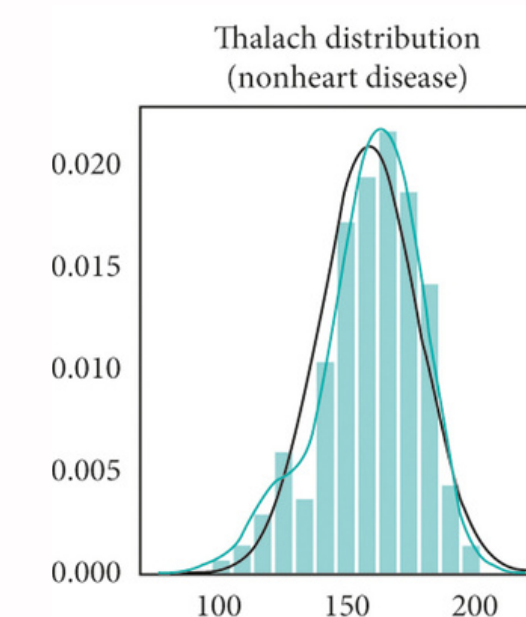
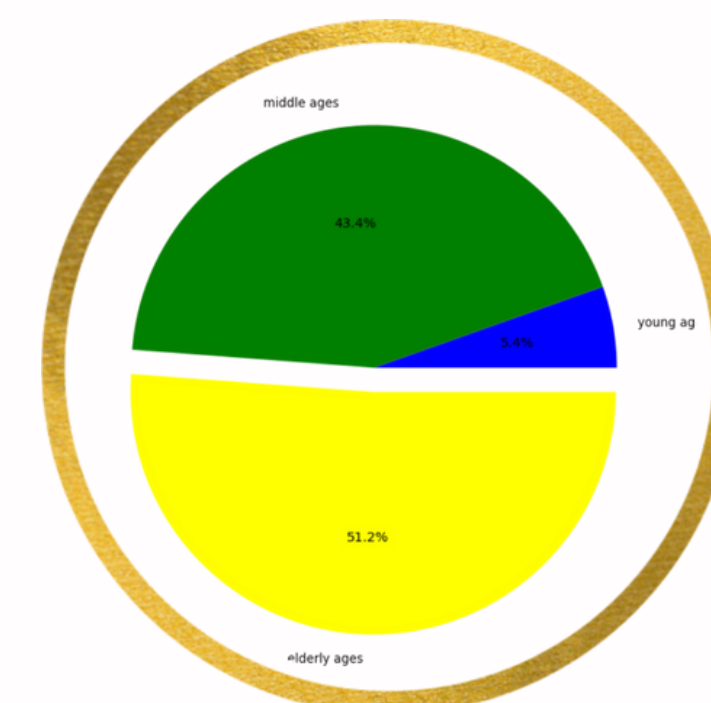
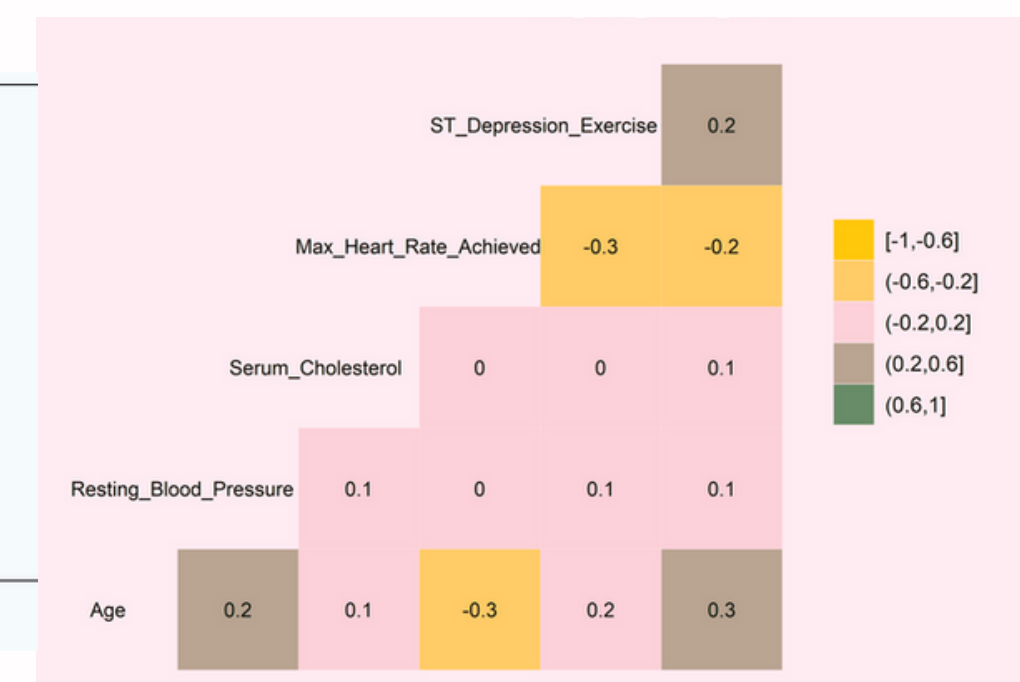
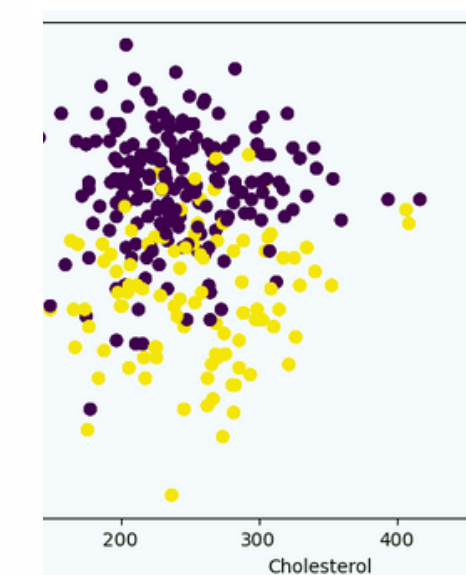


ANALYSIS

We will start with unsupervised clustering to group similar patients together based on their medical history.

Then, we will use this clustering information to assign labels to each patient and convert the data into a supervised format.

Finally, we will train a supervised learning model to predict the likelihood of heart disease.



RESULTS/FINDINGS

The model is showing 100% accuract for all the 3 models and we're picking up Random forest as our suitable model after verifying all the required parameters

CONCLUSION

Summarize your study and let the viewers know two to three key findings. You can also add a description of each that can give them an idea of what comes next. This section can also include any implications of the study, and if there are any actions or recommendations for future study.