Introduction

In this project, we aim to simulate the process of discovering the Higgs particle since Higgs particles are essential for explaining why other particles have mass. Our goal is to train a binary classifier by using given training set and then use the obtained model to predict whether an event was signal (a Higgs boson) or a background (something else). First, we process the training data, then use the processed data to train a logistics regression model, and finally use the obtained model to predict, and get the correct rate of 0.82394.