

The Higgs Boson Classification Using Regression

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Abstract—In 2013, the Higgs boson particle is discovered at the Large Hadron Collider at CERN. This project aims to recreate the process of "discovering" the Higgs particle from actual CERN particle accelerator data set by applying machine learning techniques.

I. INTRODUCTION

II. MODELS AND METHODS

A. Data Preprocessing

B. Implement Regression Algorithm

C. Feature Engineering

D. Hyperparameter Tuning

III. RESULTS

IV. DISCUSSION

V. SUMMARY