



Python Case Study NASA Dataset

WEEK 6



Data Science
Academy

CASE STUDY



Disclaimer: The data is about Asteroids – NeoWs (Near Earth Object Web Service). It is a RESTful web service for near earth Asteroid information. With NeoWs a user can: search for Asteroids based on their closest approach date to Earth, lookup a specific Asteroid with its NASA JPL small body id, as well as browse the overall dataset. Inspiration is to find potential hazardous, non-hazardous asteroids and features responsible for claiming an asteroid to be hazardous.

Dataset description: It has 4687 rows of data and 40 different columns.

Dataset link: <https://www.kaggle.com/shrutihehta/nasa-asteroids-classification>

Task: In this notebook, the use of the 'xgboost' algorithm for classification is demonstrated. The scope of this case study is to predict whether an asteroid can be hazardous or not based on its characteristics/properties using XGBClassifier, BayesianOptimization and RandomizedSearchCV function.