

Problem Statement:

The data is about Asteroids-NeoWs(Near Earth Object Web Service) is a RESTful(API) 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 data-set.

Goal:

Finding potential hazardous and non-hazardous asteroids.

Finding the features responsible for claiming an asteroid to be hazardous.

Requirements:

Models

1. Logistic Regression
2. Decision Tree
3. Random Forest
4. XGBoosting
5. Support Vector Machine
6. Multi-layer Perceptron

Libraries Required:

- 1.Pandas
- 2.Matplotlib
- 3.Seaborn
- 4.Numpy
- 5.Prediction

Advantages:

1. Due to its higher accuracy rate it is reliable.
2. It reduces the work of the astronomers.
3. It reduces the effective cost as model trained once can be applied any asteroid.
4. It identifies whether the Asteroid is precarious or not.
5. Besides identifying the threat it also identifies the features responsible for the threat.