Video Game Sales

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Abstract

The goal of this project was to use classification models and Regression models to predict the Sales to help video Game Company to improve and predict selling. I worked with data provided by Kaggle.

Design

This project originates from the https://www.kaggle.com/gregorut/videogamesales. The data is provided by Kaggle, and presents a two volume of sales (High,Low) Classifying statuses accurately via machine learning models would enable the video Game Company to take action to improve sales and allocate approach more quickly to increase the sales, also presents the data in regression.

Data

The dataset contains 16291 video Game with 12 features for each. A few feature highlights include measurements of RANK (Ranking of overall sales), Name(The games name), Platform(Platform of the games release), Year(Year of the game's release), Genre(Genre of the game), Publisher(Publisher of the game), NA_Sales(Sales in North America (in millions)), EU_Sales(Sales in Europe (in millions)), JP_Sales(Sales in Japan (in millions)), Other_Sales(Sales in the rest of the world (in millions)), Global_Sales(Total worldwide sales.).

Algorithms

Models

Score Calssification Model	
KNN	99.47%
DecisionTreeClassifier	99.42%
SVC	99.43%
MPLClassifier	99.85%
RandomForestClassifier	99.06%
AdaBoostClassifier	98.05%

score Regression Model	
LinearRegression	99.47%
DecisionTreeRegression	99.42%

Tools

- Numpy and Pandas for data manipulation
- Scikit-learn for modeling
- Matplotlib and Seaborn for plotting