

Spaceship Titanic Binary Classification

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Task and Motivation



Task Statement and Definitions

- Binary classification on the "Spaceship Titanic" dataset.
- Objective : Predict whether a passenger was transported to an alternate dimension during the Spaceship Titanic's collision with a spacetime anomaly.

Motivation

- Inspired by Kaggle's "Spaceship Titanic" competition.
- We aim to improve our skills in DA and ML using the various techniques in the engaging manner.

Related works

- <https://www.kaggle.com/codemanuelcortinhas/spaceship-titanic-a-complete-guide>
- https://www.kaggle.com/c/a_runklenin/space-titanic-eda-advanced-feature-engineering

Models and Tools

Tentative Material and Methods

LIBRARIES:

- NumPy
- Pandas
- Matplotlib
- Seaborn
- Sklearn

MODELS:

- Logistic regression
- K-nearest Neighbors
- Random Forest
- Support Vector Machine

INVESTIGATION:

- Extensive feature Engineering
- Features selection
- Hyperparameters tuning
- PCA



Analysis

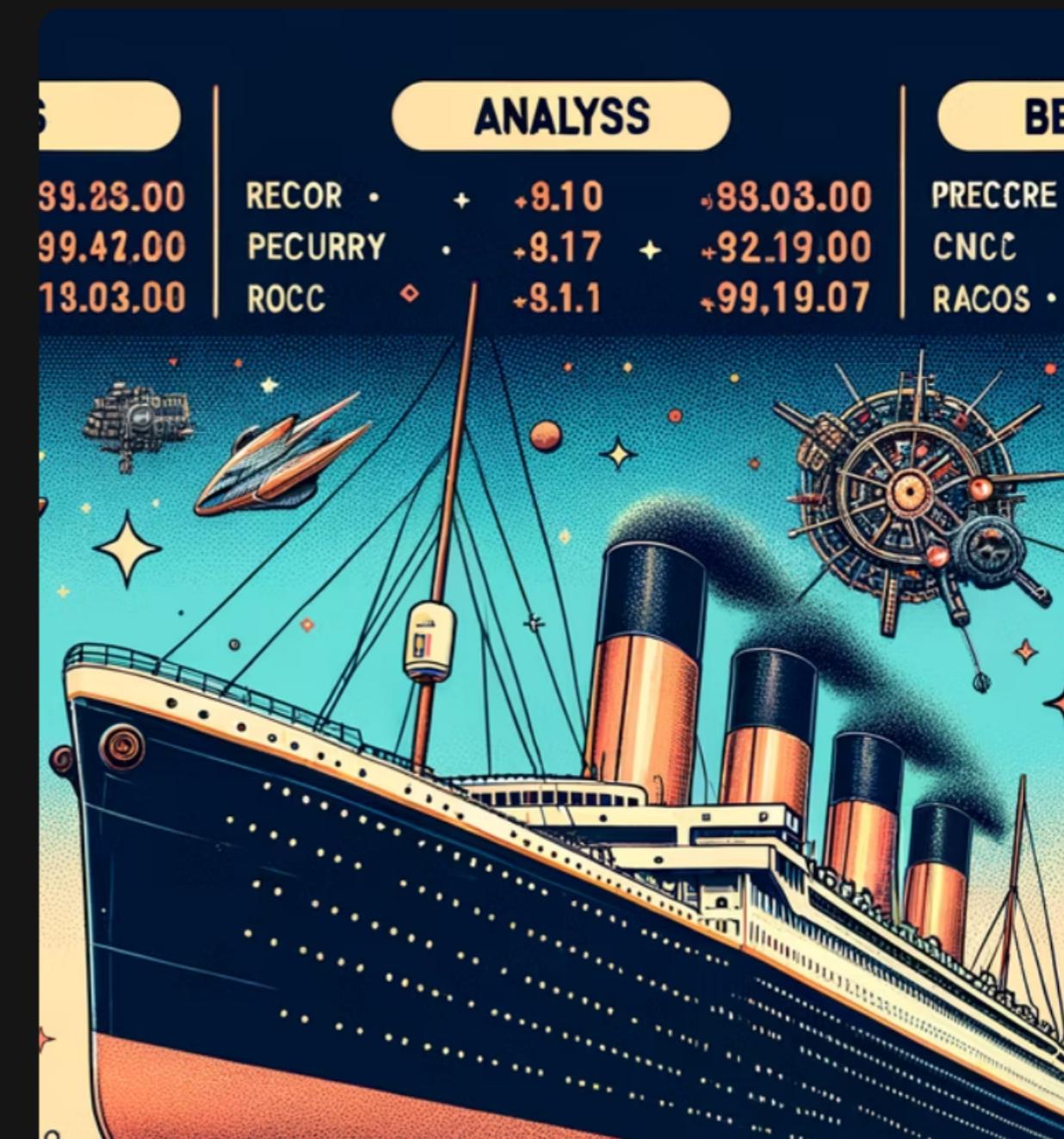
Benchmark

METRICS:

- Accuracy
- Confusion matrix
- Recall
- Precision
- F1 score
- ROC AUC

Citation

Addison Howard, Ashley Chow, Ryan Holbrook. (2022).
Spaceship Titanic. Kaggle.
<https://kaggle.com/competitions/spaceship-titanic>



Thank You!

Q&A