

Mini Project Presentation for Advanced Machine Learning for Physics, Science, and Artificial Scientific Discovery

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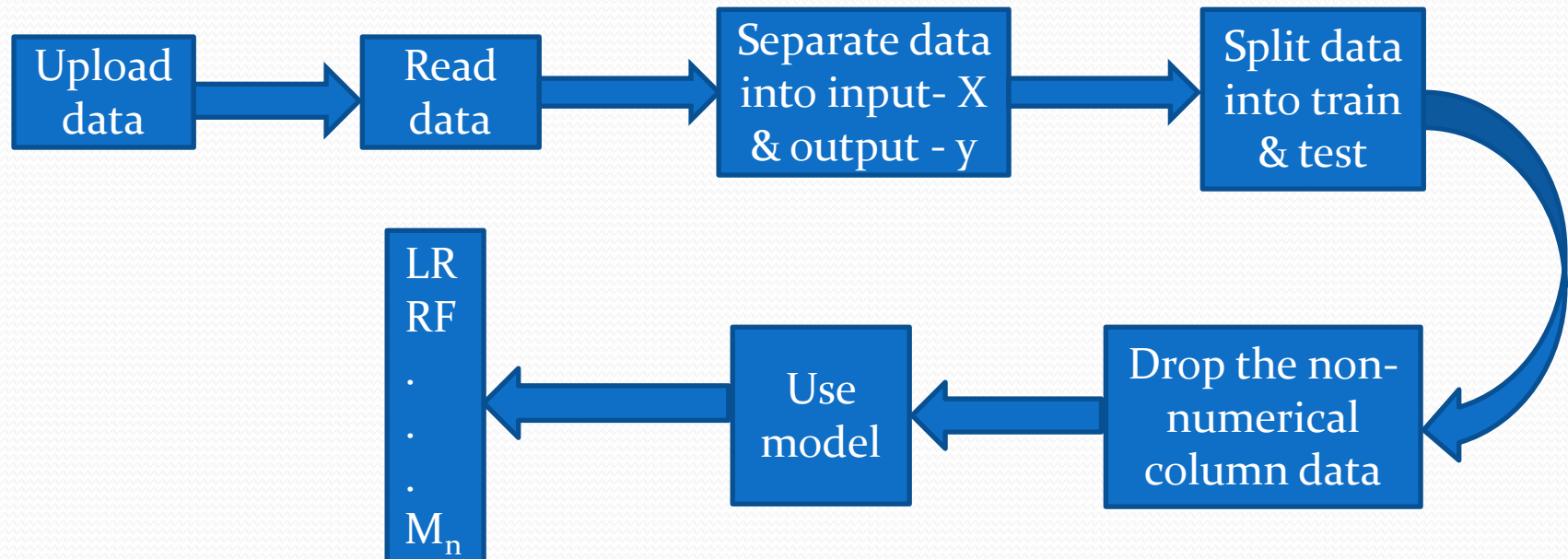
Title: Prediction of rating of the mobile app data using supervised machine learning.

Introduction:

It contains (fake) data about mobile apps that are being used by people. We want to predict the rating (“Rating”) for any app once we know the “Category” it belongs to, “No. Of Reviews”, “No of Installs”, “Size”, “Price”, “Days since Last Update”.

Used Model: Linear Regression (LR) & Random Forest (RF)

Flowchart:

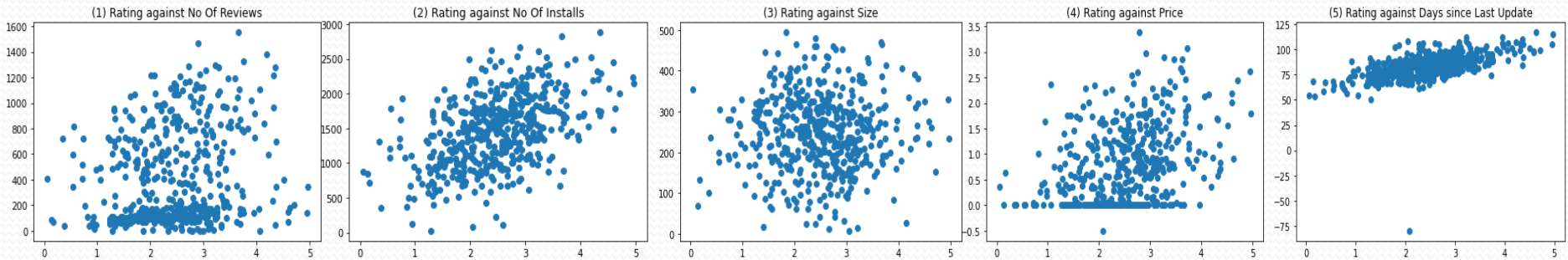


Results:

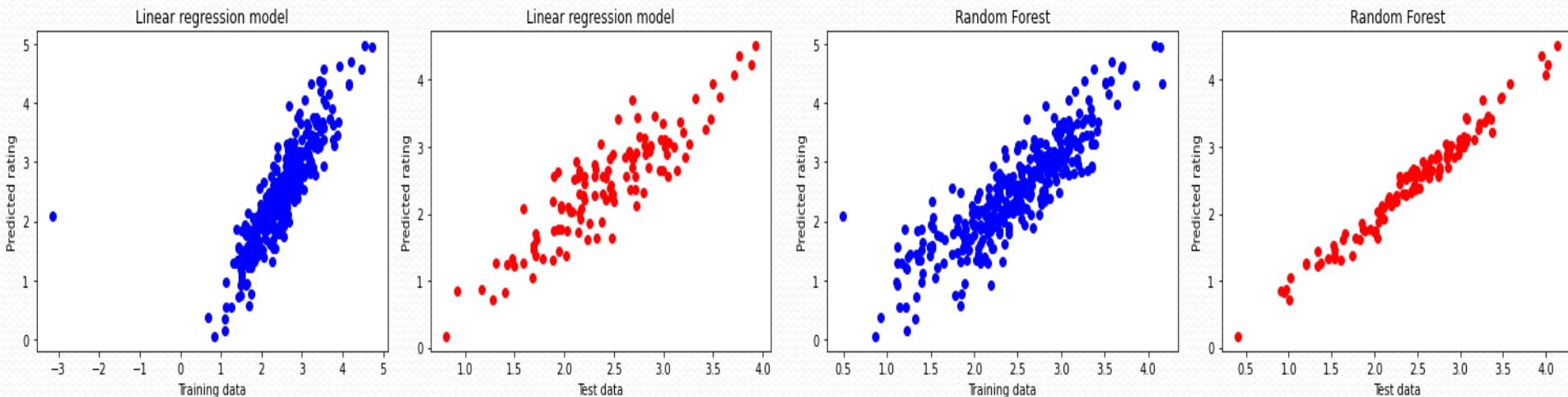
Statistics of data:

| | No Of Reviews | No Of Installs | Size | Price | Days since Last Update | Rating |
|-------|---------------|----------------|---------|---------|------------------------|---------|
| count | 500.000 | 500.000 | 500.000 | 500.000 | 500.000 | 500.000 |
| mean | 426.578 | 1456.222 | 247.870 | 0.77220 | 83.2740 | 2.46226 |
| std | 366.600 | 506.516 | 95.105 | 0.75211 | 14.9604 | 0.84085 |

Scatter plot of Rating against *each of the columns*:



Scatter plot of predicted rating vs. training/testing data:



Acknowledgement & References

Another ongoing project:

Classification of particles in magnetic field using supervised machine learning.

Software:

I used online based software: **Google colab.**

Acknowledgement:

I would like to express my special thanks of gratitude to course instructor, Florian Marquardt, who offered me the golden opportunity to do mini project.

References:

- Machine Learning for Physicists 2021.
- Scikit learn website.



Thank You!