ED5340:Data Science: Theory and practice

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Lab 9 : Multivariate Linear Regression - Part 2

Done

Opened: Friday, 24 March 2023, 1:00 PM
Due: Saturday, 25 March 2023, 11:59 PM

2. a) How about multiple linear regression (from scratch) analysis? Can you predict the phone's rating based on its pixel density, screen size, weight, RAM, processor frequency, screen-to-body ratio, height, internal memory, capacity, and resolution using 80-20 train-test split ratio? (Using gradient descent approach).

b) What is the MSE for this model? Also explore R-squared (R2) error.

3. a) Can you visualise the relationship between the phone's rating and each of its features using scatter plots (Individual scatter plot for each feature)?
b) Which features have a strong linear relationship with the rating, and which features appear to have little or no impact on the rating?

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ma22m019 Sohit Pathak

- MA6380:JAN-MAY 2023
- ED5340:JAN-MAY 2023
  - Participants
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  - General
  - Link to Video Lectures of this course
  - 1st day
  - 2nd day - 19/01/2023
  - CW1 - Post your code on string
  - LAB1-Basic Python and strings
  - 4th day, Wednesday 25th Jan
  - CW2: Thursday, 2nd Feb
  - CW3: On List comprehension
  - LAB2-Conditional expression and list
  - Tuesday, 7th Feb
  - CW4 - Thursday 9th Feb
  - LAB3: Zip function, set and tuple
  - CW5 - On Dictionaries
  - CW6 - On Functions

3. a) Can you visualise the relationship between the phone's rating and each of its features using scatter plots (Individual scatter plot for each feature)?
b) Which features have a strong linear relationship with the rating, and which features appear to have little or no impact on the rating?

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Submission status

Submission status	Submitted for grading
Grading status	Graded
Time remaining	Assignment was submitted 1 hour 12 mins early
Last modified	Saturday, 25 March 2023, 10:46 PM
File submissions	LAB_9_PART2_MA22M019.ipynb 25 March 2023, 10:46 PM
Submission comments	Comments (0)

Feedback