Hope Artificial Intelligence Assignment-Regression Algorithm

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Download Set:

Google Drive Link Click here .

Git Hub Link:
https://raw.githubusercontent.com/RamishaRaniK/dataset/main/insurance_pre.csv

Problem Statement or Requirement:

A client's requirement is, he wants to predict the insurance charges based on the several parameters. The Client has provided the dataset of the same.

As a data scientist, you must develop a model which will predict the insurance charges.

1.) Identify your problem statement
    a. Predict the insurance charges based on the input value
2.) Tell basic info about the dataset (Total number of rows, columns)
    a. Dataset contains 6 columns. 5 independent columns and 1 dependent columns. Out of 5 independent columns 2 of the columns are nominal columns (Sex and Smoker).
3.) Mention the pre-processing method if you're doing any (like converting string to number – nominal data)
    a. Out of 5 independent columns 2 of the columns are nominal columns (Sex and Smoker). We need use get_dummies function from Pandas library for this.
    b. Assign all input columns into independent variable and assign 1 output column into dependent variable.
    c. Next split the dataset into train and test using train_test_split function
    d. Next model creation use Fit function on regression.
4.) Develop a good model with r2_score. You can use any machine learning algorithm; you can create many models. Finally, you have to come up with final model.
    a. Predict the model and identify r2_score value
5.) All the research values (r2_score of the models) should be documented. (You can make tabulation or screenshot of the results.)

    a. Capture all r2_score value
6.) Mention your final model, justify why u have chosen the same.
    a. Finalized the final model. And provide justification.

Kindly create Repository in the name Regression Assignment.

Upload all the ipynb and final document in the pdf

Communication is important (How you are representing the document.)