

Hope Artificial Intelligence



Assignment-Regression Algorithm

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
- 2.) Tell basic info about the dataset (Total number of rows, columns) 1338* 6
- 3.) Mention the pre-processing method if you're doing any (like converting string to number – nominal data)
to predict the insurance charges based on age,sex,smoker,children,bmi
converting sex,smoker string values to number using get dummies function
- 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.
- 5.) All the research values (r2_score of the models) should be documented. (You can make tabulation or screenshot of the results.)
- 6.) Mention your final model, justify why u have chosen the same.

Random forest is best for this use case as the r2 score is 0.82 that is closer to 1
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.)