MACHINE LEARNING

Finding lowest RMSE in a Regression

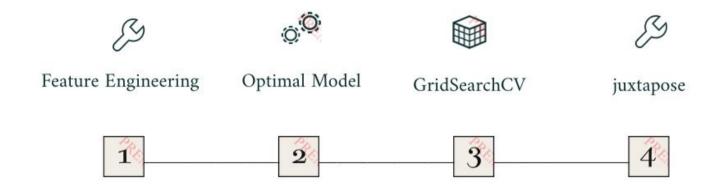
SUBMITTED BY

PRAMOSH SHRESTHA 3rd of July 2021

Submitted to LeapFrog Tech.

PROCESS

Pipeline for the Regression



- The best approach would be to build a Pipeline.
- It's provided by sklearn
- It's a linear process.

Feature Engineering

- Check the distribution of data
- Check for null and impute
- Perform Scaling if necessary
- PCA is not necessary for two feature sets.

Model



- Time to pick a model
- Neural Networks, Decision
 Trees, SVR, etc are viable options.
- Choose SVR because it's fast and easily regularised.

GridSearchCV

- Research about the model's hyperparameters
- Perform GridSearchCV
- Observer the best parameters
- Select the best model

Juxtapose

- - Fit and Predict the engineered DataSet on the best estimator
 - The RMSE 1.43
 - Fit and Predict on the unengineered DataSet on the unoptimized model
 - The RMSE is **3.70**



The most precious gift we can offer anyone is our attention. When mindfulness embraces those we love, they will bloom like flowers



Thich Nhat Hanh

Thank you for your attention