UDACITY

‹ Return to "Machine Learning Engineer Nanodegree" in the classroom

Predicting Boston Housing Prices

REVIEW
CODE REVIEW
HISTORY

Meets Specifications

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congratulations ! 👍👍👍

You did an awesome work and everything is correctly ! 🤘

Cheers

Data Exploration

> **All requested statistics for the Boston Housing dataset are accurately calculated. Student correctly leverages NumPy functionality to obtain these results.**

Perfect !
NumPy is the fundamental package for scientific computing with Python. It contains among other things:

- a powerful N-dimensional array object
- sophisticated (broadcasting) functions
- tools for integrating C/C++ and Fortran code
- useful linear algebra, Fourier transform, and random number capabilities
  Besides its obvious scientific uses, NumPy can also be used as an efficient multi-dimensional container of generic data. Arbitrary data-types can be defined. This allows NumPy to seamlessly and speedily integrate with a wide variety of databases.
  http://www.numpy.org/

Student correctly justifies how each feature correlates with an increase or decrease in the target variable.

Nice intuition! 100% right!

It is super essential the intuition in machine learning projects because you can evaluate your final results.

Developing a Model

Student correctly identifies whether the hypothetical model successfully captures the variation of the target variable based on the model's R^2 score.
The performance metric is correctly implemented in code.

Great Job !

One of most score used in Machine Learning and Data Science is the R-Square and score de 0% means the model explains none of the variability and 100% the model explains all the variability

Student provides a valid reason for why a dataset is split into training and testing subsets for a model. Training and testing split is correctly implemented in code.

100% right ! You can also find more info here: https://info.salford-systems.com/blog/bid/337783/Why-Data-Scientists-Split-Data-into-Train-and-Test

Analyzing Model Performance

Student correctly identifies the trend of both the training and testing curves from the graph as more training points are added. Discussion is made as to whether additional training points would benefit the model.

Basically, you just spend time for (maybe) a small increase score, so adding more points is not beneficial.

Student correctly identifies whether the model at a max depth of 1 and a max depth of 10 suffer from either high bias or high variance, with justification using the complexity curves graph.

Awesome Work ! If you want to research a little more, you can find more info here:
http://scott.fortmann-roe.com/docs/BiasVariance.html

Student picks a best-guess optimal model with reasonable justification using the model complexity graph.

Evaluating Model Performance

Student correctly describes the grid search technique and how it can be applied to a learning algorithm.

Well Done. It was a great answer.
In short, The grid search technique is such that a set of parameters and values are chosen, and the learning algorithm is run for each combination of parameters to find which model achieves the highest score.

Student correctly describes the k-fold cross-validation technique and discusses the benefits of its application when used with grid search when optimizing a model.

great answer.
Just for your complimentary research, I linked a video for you.
https://www.youtube.com/watch?v=TIgfjmp-4BA

Student correctly implements the `fit_model` function in code.

All lines are correct.

Student reports the optimal model and compares this model to the one they chose earlier.

Nice value, values most often reported are 4 or 5

Student reports the predicted selling price for the three clients listed in the provided table. Discussion is made for each of the three predictions as to whether these prices are reasonable given the data and the earlier calculated descriptive statistics.

I agree with your answer

Student thoroughly discusses whether the model should or should not be used in a real-world setting.

I agree with your point of view ! Perfect Discussion

⤓ DOWNLOAD PROJECT

RETURN TO PATH   4/4

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