

1. When assessing the models, we noticed a slight increase in the R2 scoring for Ridge regression when compared to Linear Regression. However, there's no noticeable difference with the RSS scoring among the two regression methods. They both consider the same grid and data.

2. Best Hyperparameters: {'alpha': 0.011999999999999999, 'fit\_intercept': True, 'normalize': True, 'solver': 'lsqr'}

3. Baseline —> RSS: 1308.1884346839277 || R2: 0.321 +/- (0.054)

Best —> RSS: 1308.5409648590435 || R2: 0.3333967395697345

4. <https://machinelearningmastery.com/hyperparameter-optimization-with-random-search-and-grid-search/>

[https://scikit-learn.org/stable/modules/generated/sklearn.linear\\_model.Ridge.html#sklearn.linear\\_model.Ridge.set\\_params](https://scikit-learn.org/stable/modules/generated/sklearn.linear_model.Ridge.html#sklearn.linear_model.Ridge.set_params)

5. Python 3.9.1

```
sklearn.model_selection import GridSearchCV, RepeatedKFold
```

```
sklearn.neighbors import KNeighborsClassifier
```

```
sklearn.model_selection import KFold
```

```
sklearn.model_selection import cross_val_score
```

```
sklearn.linear_model import LinearRegression
```

```
sklearn.model_selection import train_test_split
```

```
sklearn.linear_model import Ridge
```

```
scipy.stats import loguniform
```