



Food Price Prediction

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Section: 4



Agenda

Project About

Statistics

Average time

Regularization &

Optimization

Learning Curve



Project About

Russia's shelling of Ukrainian port infrastructure and grain warehouses affects food prices, so this data was collected in order to draw attention to this problem. Please support Ukraine - <https://savelife.in.ua/en/donate-en/#donate-army-card-monthly> Data were getting from - <https://shop.silpo.ua> (one shop), <https://metro.zakaz.ua/uk/>, <https://www.atbmarket.com>





Dataset statistics

Total size after merging: (98414,
9)

Number of classes: 9

Number of samples: 98414

```
df_final.describe().T
[26] ✓ 0.1s
```

	count	unique	top	freq
id	98414	58128	04823115401540	6
name	98326	42150	Шкарпетки чоловічі Cool Socks	30
unit	98318	1368	pcs	26268
price	98316	7793	5л	815
oldPrice	98315	5507	None	53115
image	98313	50922	None	3306
slug	89654	34480	ukrayina	224
quantity	61915.0	8457.0	0.0	4485.0
categories	79133	6563	498, 501	1436

```
df_final.info()
[27] ✓ 0.0s
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 98414 entries, 0 to 318984
Data columns (total 9 columns):
#   Column      Non-Null Count  Dtype
---  -
0   id           98414 non-null  object
1   name         98326 non-null  object
2   unit         98318 non-null  object
3   price        98316 non-null  object
4   oldPrice     98315 non-null  object
5   image        98313 non-null  object
6   slug         89654 non-null  object
7   quantity     61915 non-null  object
8   categories   79133 non-null  object
dtypes: object(9)
memory usage: 7.5+ MB
```





Average time

Logistic Regression: score 0.01

Nearest Neighbor: The accuracy of the KNN regressor on test data is
0.02

Random Forest: Score: MSE train: 1166842382.354, test:
2971330614.258 R^2 train: 0.447, test: 0.025

Average time 5s





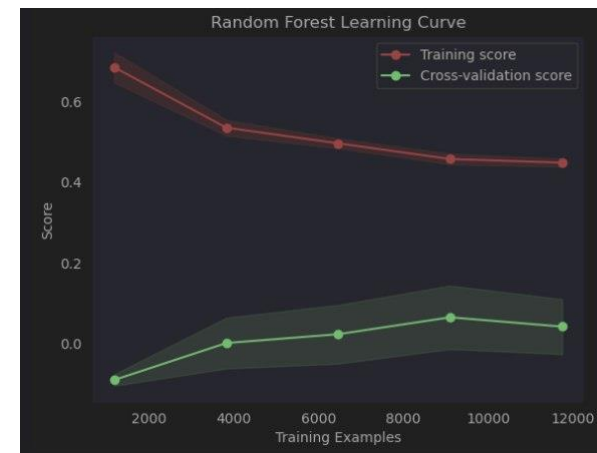
Regularization & Optimization

L2 regularization & Ridge were used for optimization





Learning Curve





Thank You

