



Fish Market Project

By Team H: Michael, Stefano, Sam, and Isaac

Model and loss function

- Our model was based on polynomial regression with an initial order of 2.
- We used MSE as our loss function.

$$\text{MSE} = \frac{1}{n} \sum_{i=1}^n (y_i - \tilde{y}_i)^2$$

Feature transformation,
regularization,
hyperparameters, etc.

.05

Value of α

2

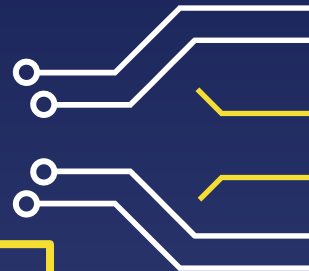
Order (Value of M)

L2 (Ridge)

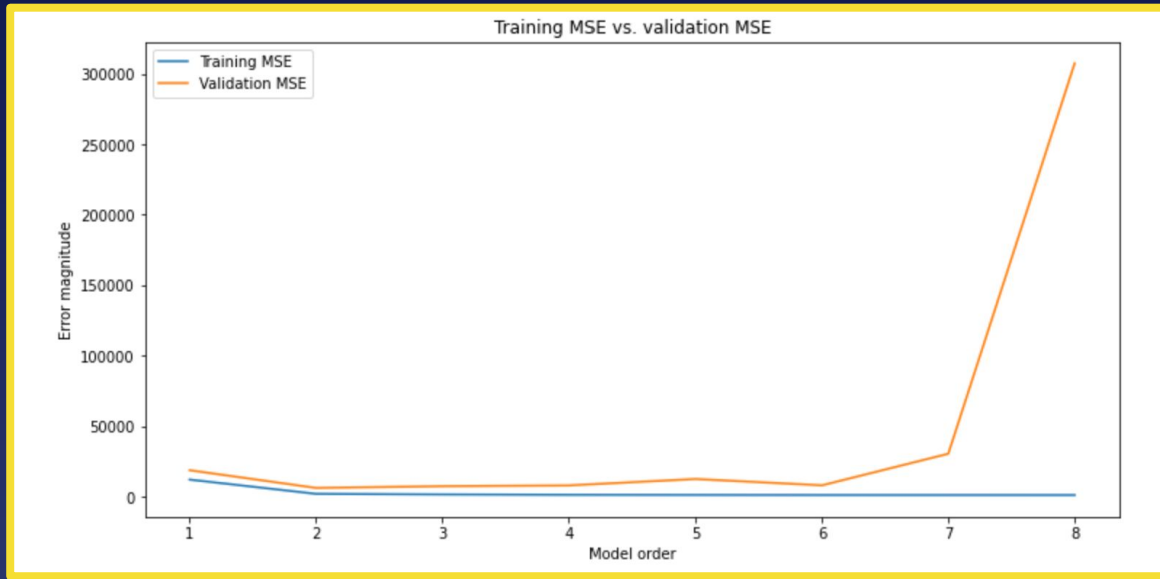
Regularization Type

Polynomial

Feature Transformation

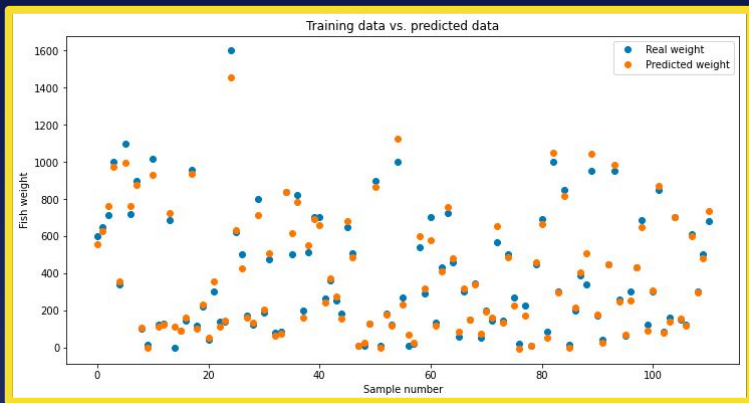


Training vs. validation error

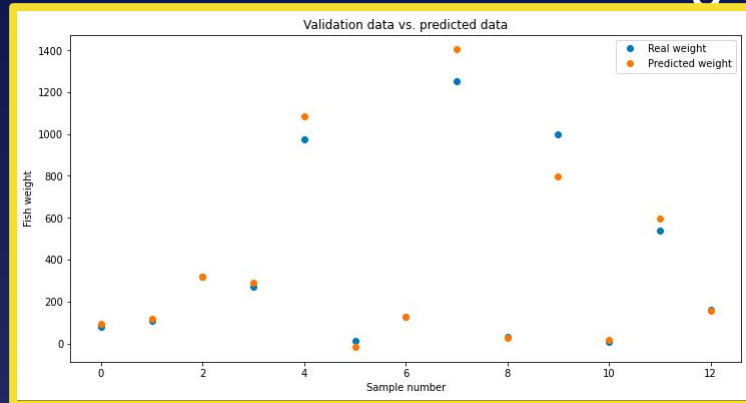


Model performance

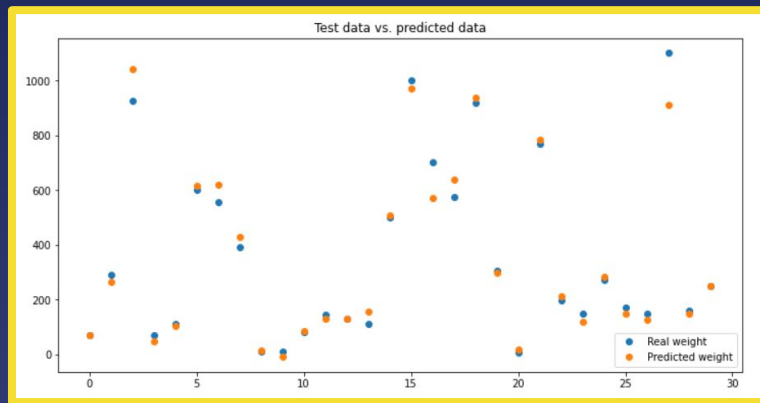
Training



Validation



Test





Error Values

30.1 / 46.9 / 31.9

MAE

1970 / 6168 / 2773

MSE

44.3 / 78.5 / 52.6

RMSE

Training / Validation / Test (in grams)

Challenges



Revisions

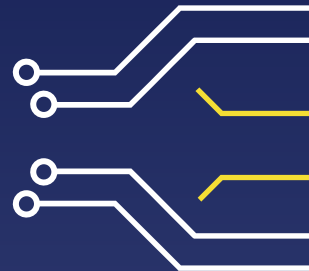
- Simultaneous work was difficult!

Loss of work

- Ridge regularization, Loss functions deleted

Changing Orders

- Started at 5, but got MSE values in the 10,000s!





Conclusion

What did we learn?

