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.

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

Feature transformation, regularization, hyperparameters, etc.

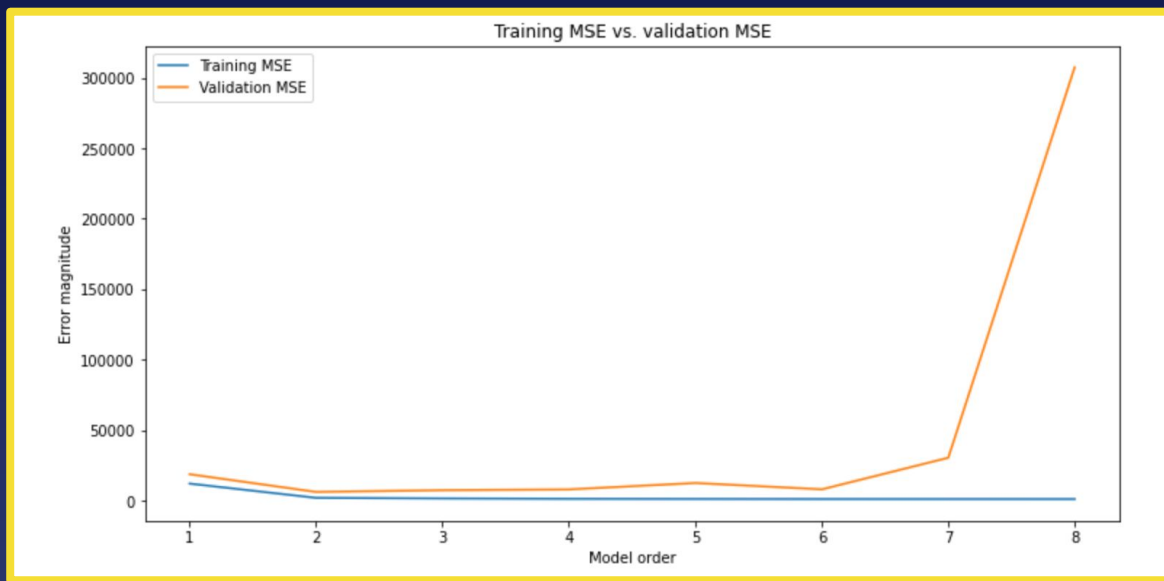**.05**

Value of α

2

Order (Value of M)

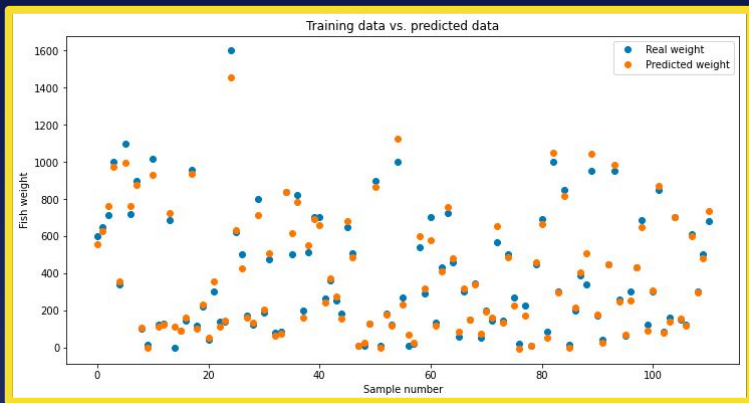**L2 (Ridge)**

Regularization Type

Polynomial

Feature Transformation

Training vs. validation error

Training MSE vs. validation MSE

Model performance

Training

Training data vs. predicted data

Validation

Validation data vs. predicted data

Test

Test data vs. predicted data
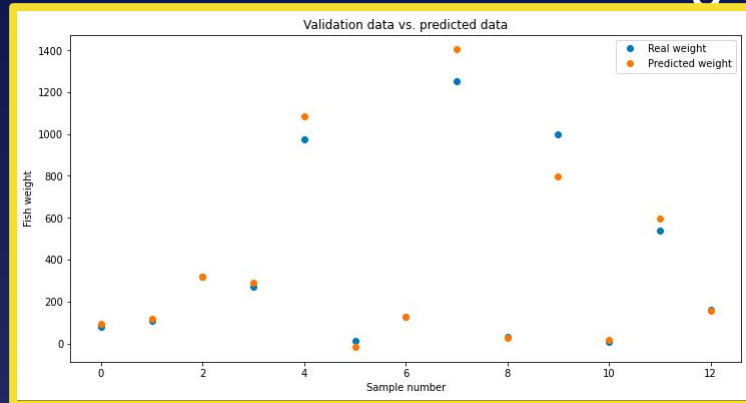
Error Values

30.1 / 46.9 / 31.9	1970 / 6168 / 2773	44.3 / 78.5 / 52.6
MAE	**MSE**	**RMSE**

Training / Validation / Test (in grams)
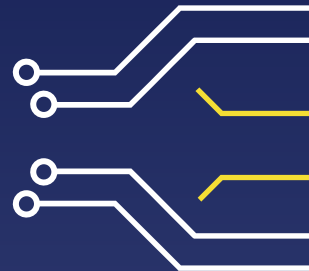
Challenges

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?