Current Process

Dataset

weight data summary:

Average: 3.1761438846588135 g, Max Weight: 7.28000020980835 g, Min Weight: 0.6600000262260437 g, Mediam: 3.0799999237060547 g

Size Prediction

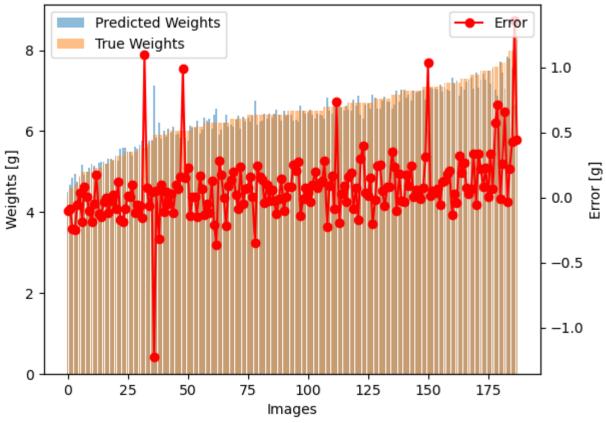
Predict Length and Height of a fish.

Length Error:

Average: 0.16352812945842743 cm, Max Error: 1.3571410179138184 cm, Min Error: 0.0009355545043945312 cm,

Mediam: 0.10247135162353516 cm

Block Diagram with Two Datasets and Error



TO DO: Get rid of outliers/segment fish manually for further weight prediction.

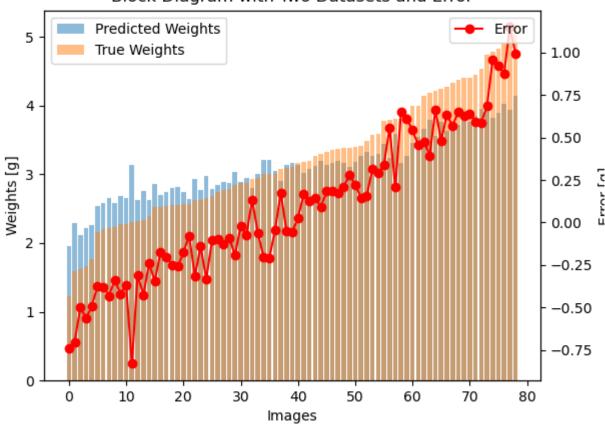
Weight Prediction

FeedFoward NN:

Weight Error:

Average: 0.0959256961941719 g, Max : 1.1504442691802979 g, Min : -0.8314871788024902 g, Mediam : 0.0901954174041748 g

Block Diagram with Two Datasets and Error

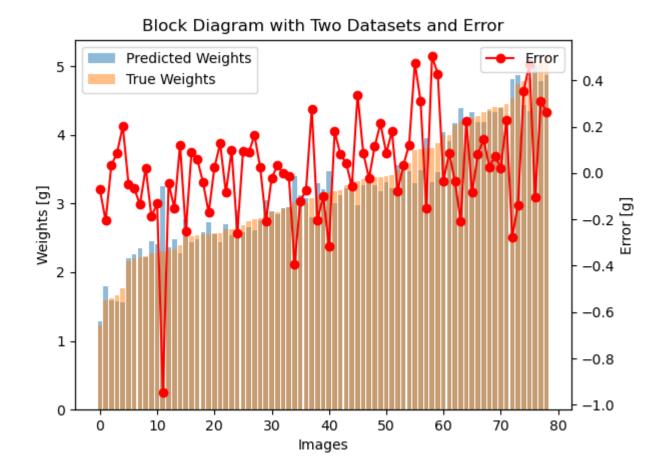


XGBoost:

Weight Error:

Average: 0.020155910402536392 g,

Max : 0.5028817653656006 g, Min : -0.9480986595153809 g, Mediam : 0.023881912231445312 g



Error Evaluation

Error results from detection & segmentation:



• wrong width and height infomation is generated.

Error results from model prediction: