

Topic: Crop Yield Prediction Using Neural Network

Data Segmentation:

| | |
|----------------|------|
| Training set | 4952 |
| Validation set | 619 |
| Test set | 620 |

Model Specification:

| Layer (type) | Output Shape | Param # |
|------------------|--------------|---------|
| dense_40 (Dense) | (None, 256) | 30,720 |
| dense_41 (Dense) | (None, 128) | 32,896 |
| dense_42 (Dense) | (None, 64) | 8,256 |
| dense_43 (Dense) | (None, 1) | 65 |

Total params: 215,813 (843.02 KB)
Trainable params: 71,937 (281.00 KB)
Non-trainable params: 0 (0.00 B)
Optimizer params: 143,876 (562.02 KB)

Model Results:

| Training Set | |
|---------------------|--------|
| R-squared | 0.9951 |
| Mean Absolute Error | 0.0112 |
| Mean Squared Error | 0.0002 |

| Test Set | |
|---------------------|--------|
| R-squared | 0.7828 |
| Mean Absolute Error | 0.0667 |
| Mean Squared Error | 0.0102 |

| Validation Set | |
|---------------------|--------|
| R-squared | 0.8330 |
| Mean Absolute Error | 0.0575 |
| Mean Squared Error | 0.0076 |

