

Train vs Validation vs Test

Training Set (60-70%)

Validation (15-20%)

Test (15-20%)



Training Set

Fit model parameters

Used to learn patterns and train the model's weights and parameters



Validation Set

Tune hyperparameters

Acts as proxy for real-world performance; prevents overfitting during development



Test Set

Final unbiased evaluation

Remains completely unseen until final evaluation; never used during development

Best Practices

- Never use test data during model development
- Proper splitting ensures honest performance assessment
- Keep test set completely isolated until final evaluation