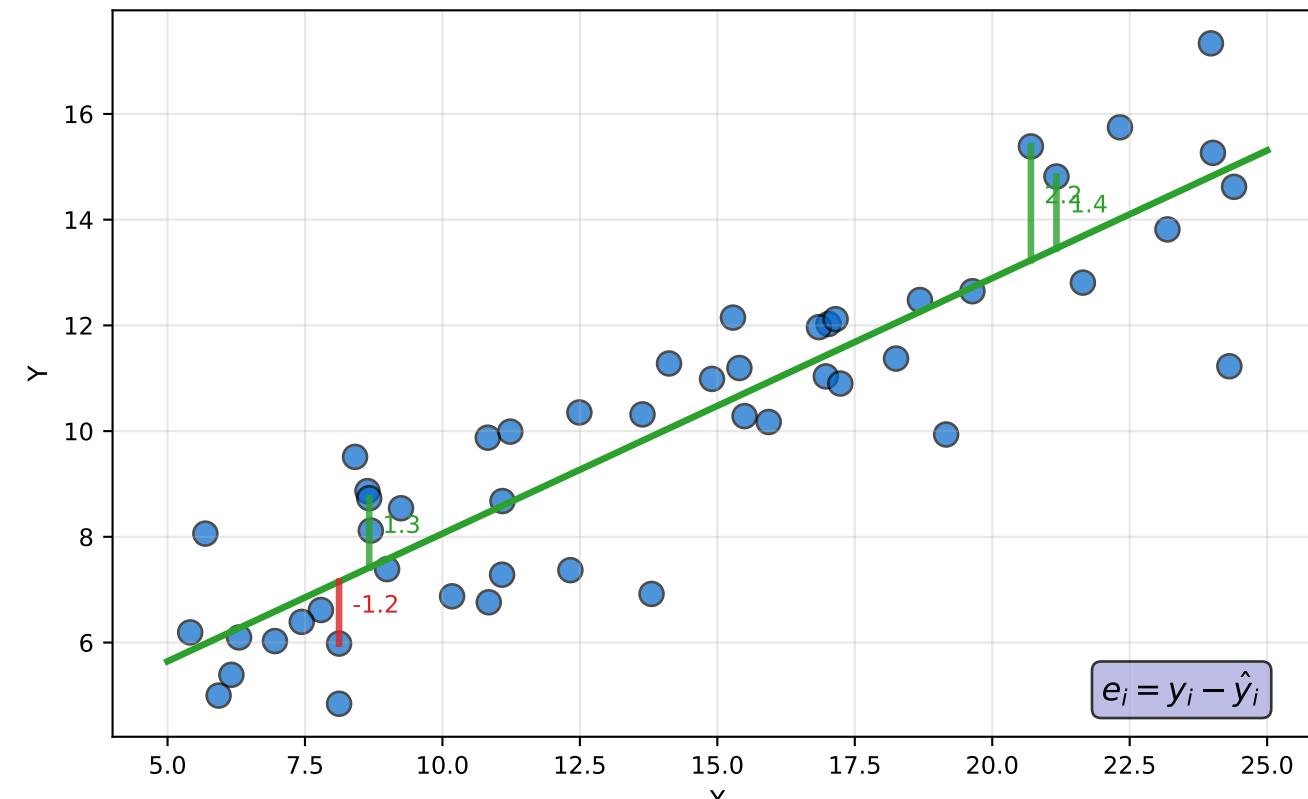
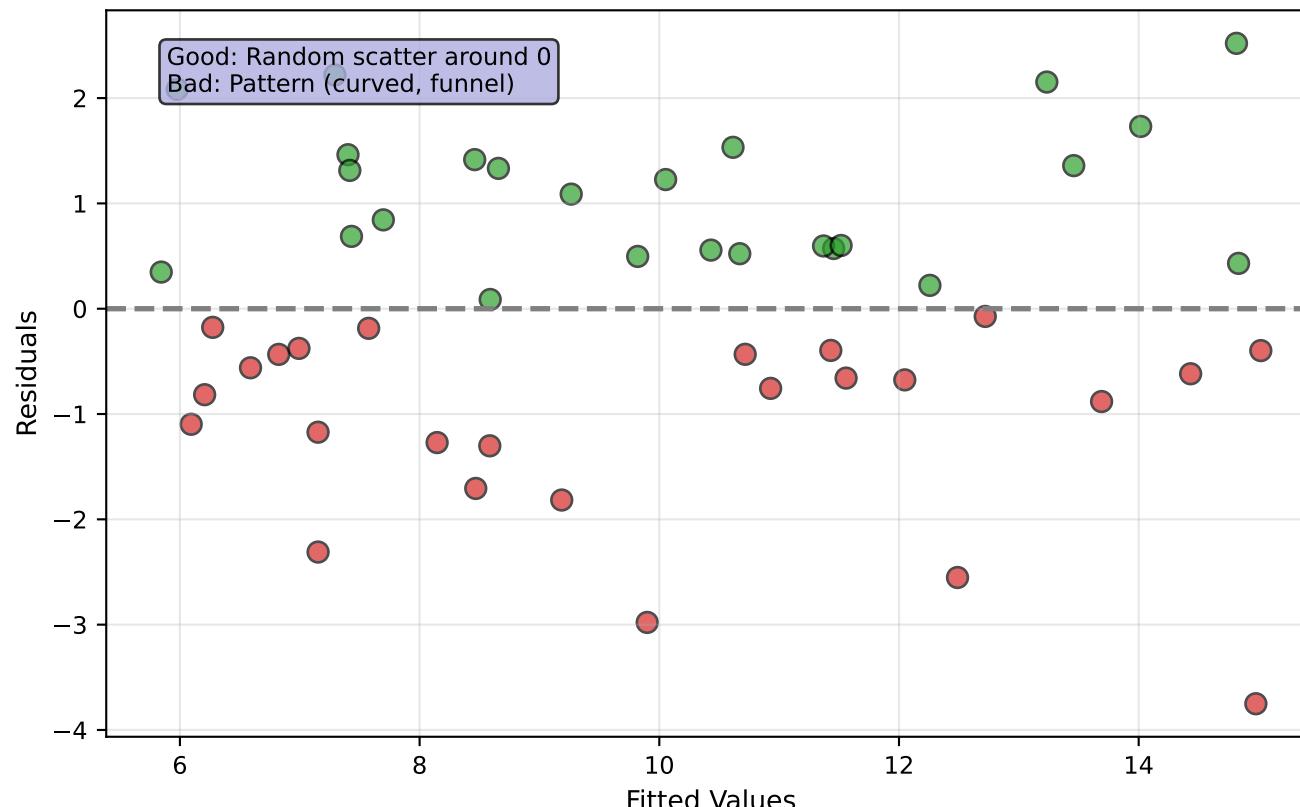


Residual Analysis: Checking Model Quality

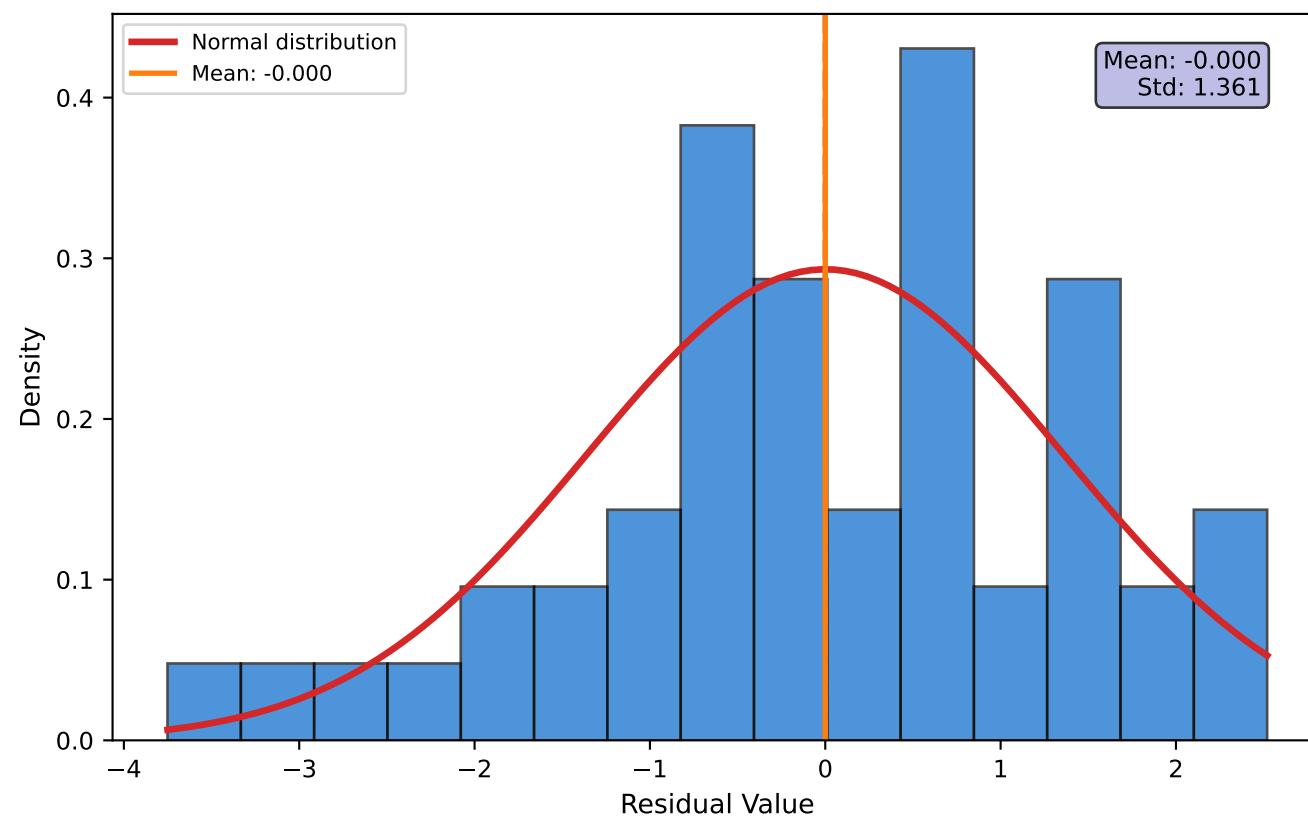
Residuals = Actual - Predicted



Residuals vs Fitted Values



Residual Distribution



Diagnostic Summary

RESIDUAL DIAGNOSTIC CHECKLIST

- MEAN SHOULD BE NEAR ZERO
Mean residual: -0.0000
Status: PASS
- VARIANCE SHOULD BE CONSTANT
(Check Residuals vs Fitted plot)
Look for: Funnel shape = heteroscedasticity
Status: Check visually
- NO PATTERN IN RESIDUALS
(Check Residuals vs Fitted plot)
Look for: Curves, waves = non-linearity
Status: Check visually
- NORMALLY DISTRIBUTED
(Check histogram and Q-Q plot)
Status: Check visually

KEY METRICS:

- MSE: 1.8519
- RMSE: 1.3608
- MAE: 1.0960
- Residual Std: 1.3608