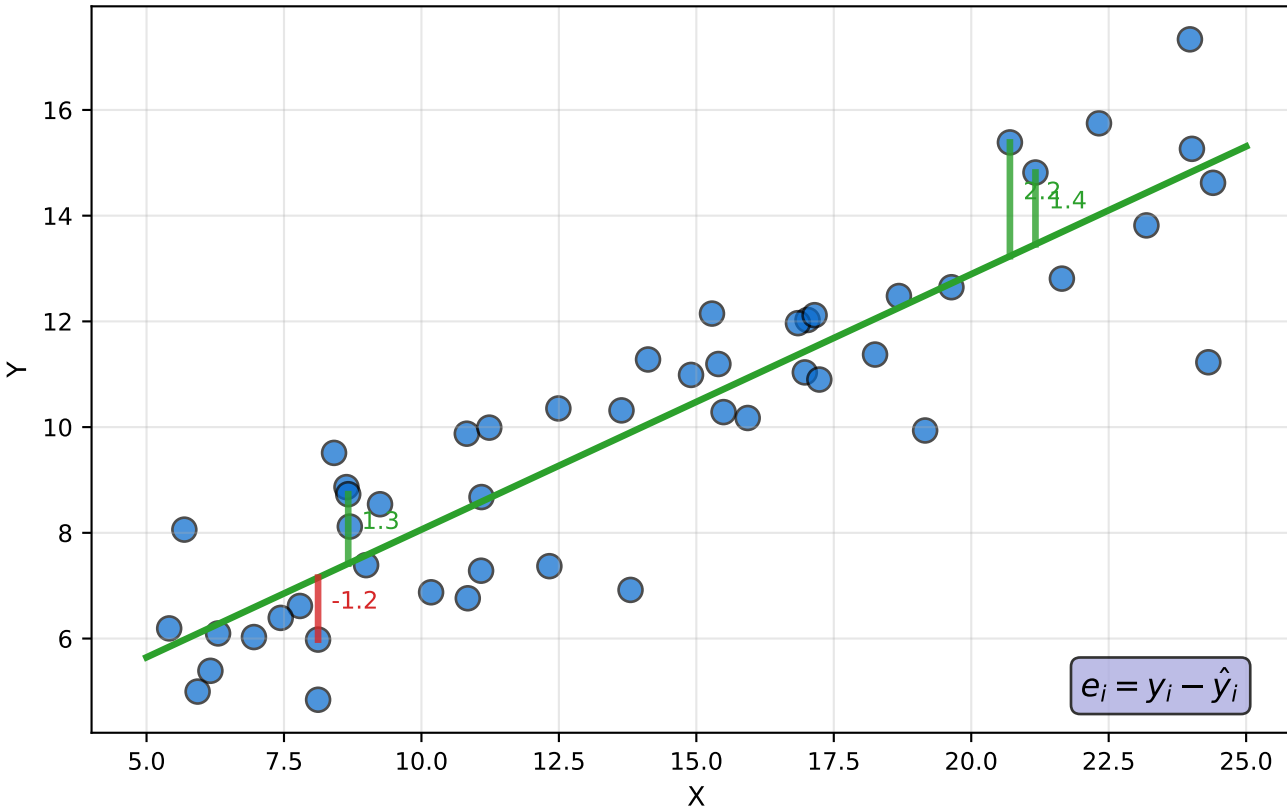
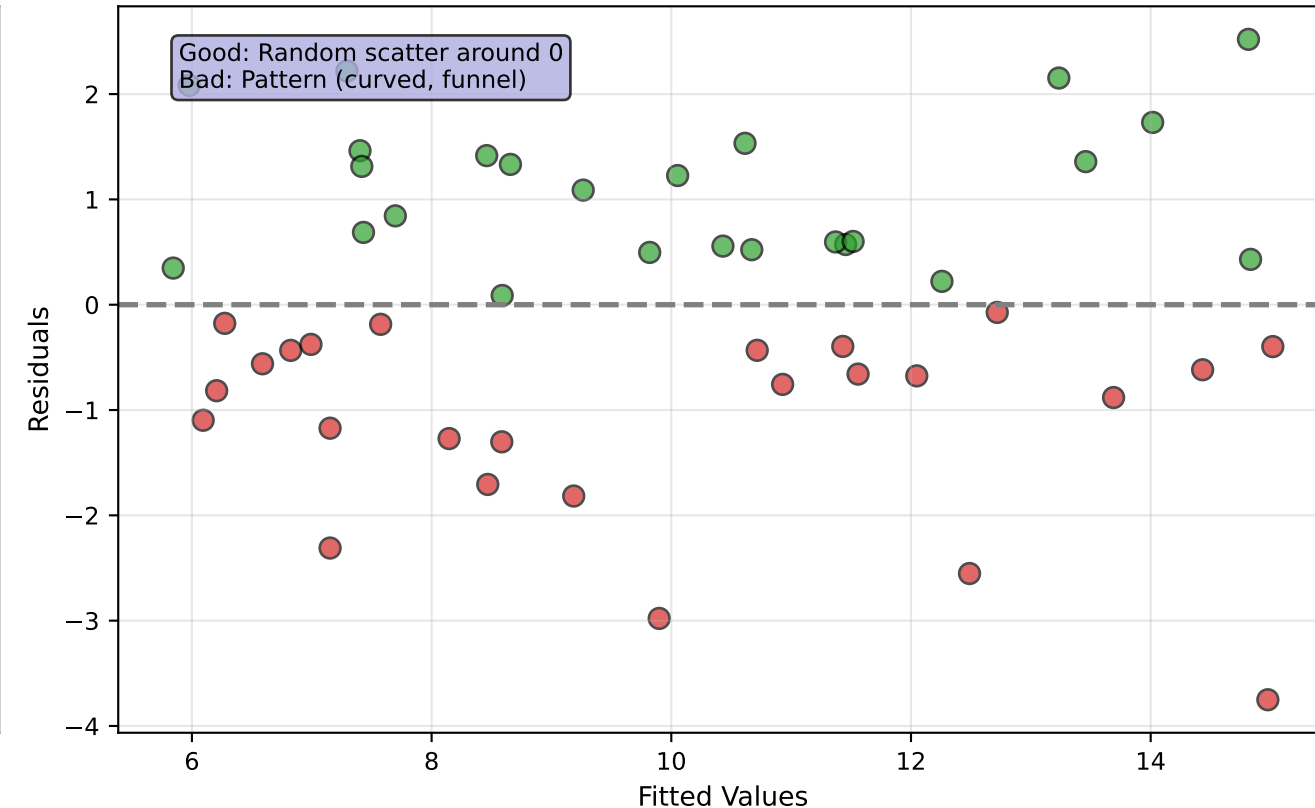


# Residual Analysis: Checking Model Quality

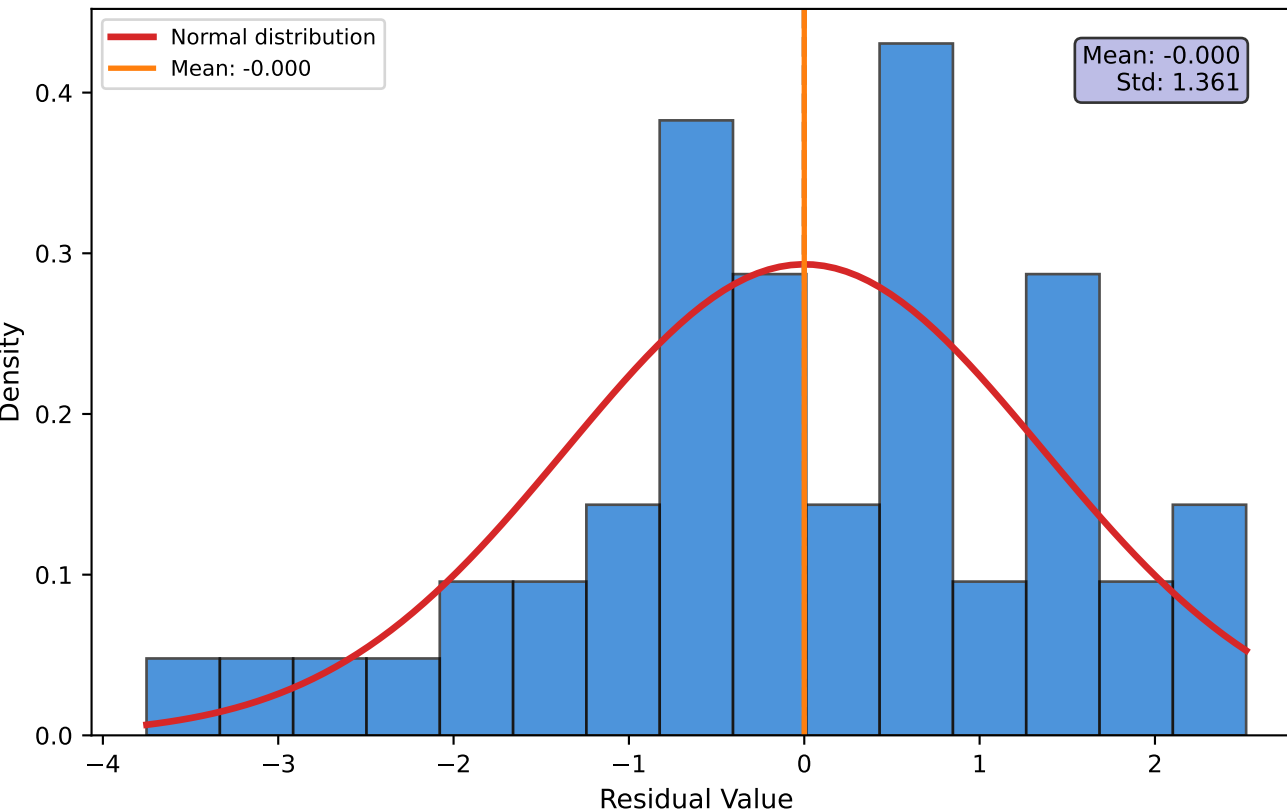
Residuals = Actual - Predicted



Residuals vs Fitted Values



Residual Distribution



Diagnostic Summary

## RESIDUAL DIAGNOSTIC CHECKLIST

1. MEAN SHOULD BE NEAR ZERO  
Mean residual: -0.0000  
Status: PASS
2. VARIANCE SHOULD BE CONSTANT  
(Check Residuals vs Fitted plot)  
Look for: Funnel shape = heteroscedasticity  
Status: Check visually
3. NO PATTERN IN RESIDUALS  
(Check Residuals vs Fitted plot)  
Look for: Curves, waves = non-linearity  
Status: Check visually
4. 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