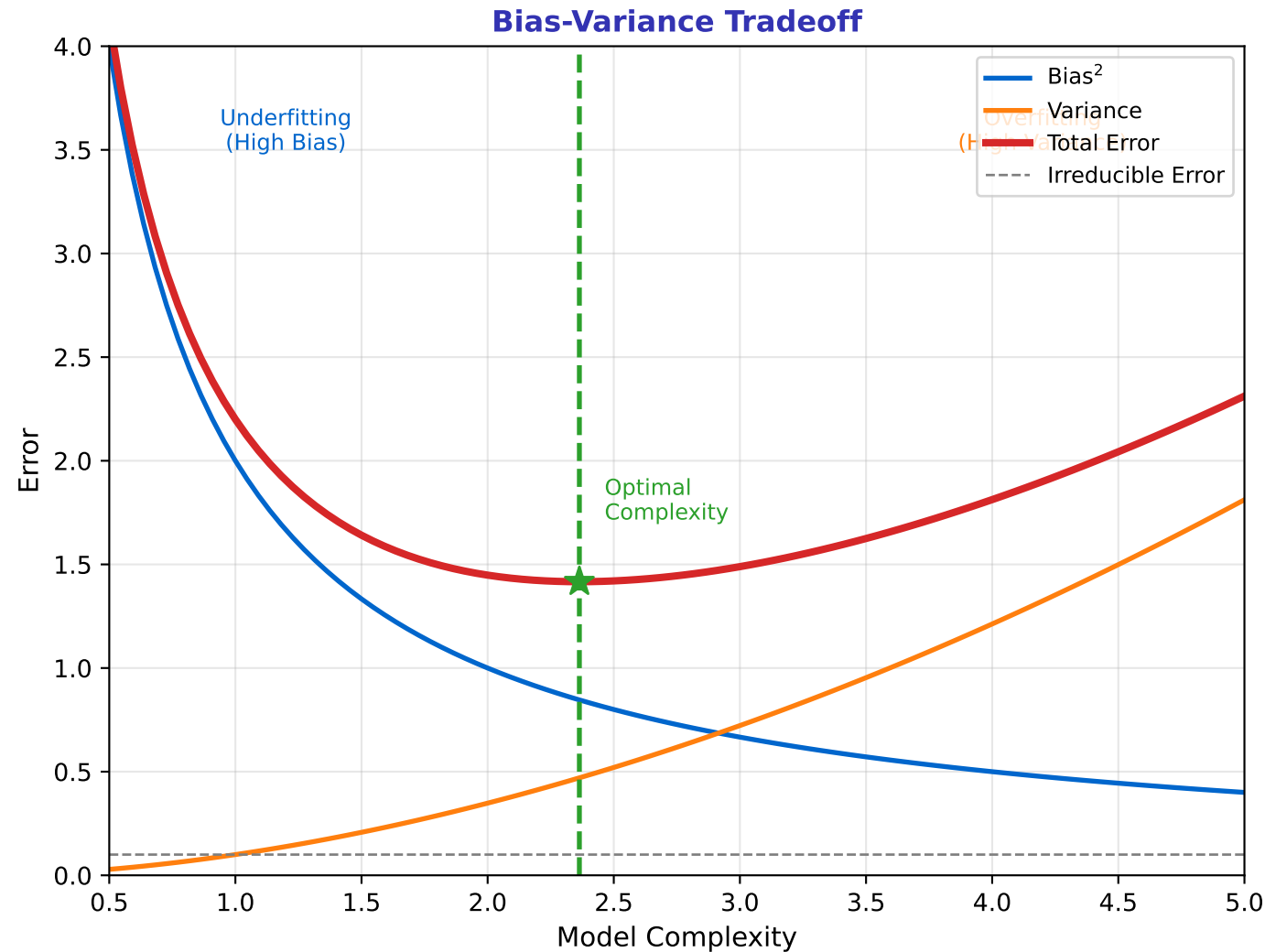
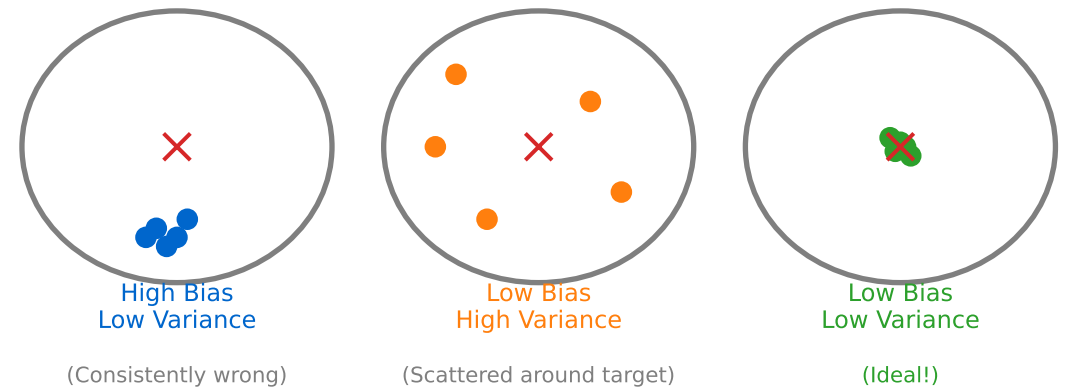


# Bias-Variance Tradeoff: The Fundamental Challenge



## Understanding Bias vs Variance



$$\text{Total Error} = \text{Bias}^2 + \text{Variance} + \text{Irreducible Noise}$$

We can control Bias and Variance through model complexity