Elastic Net: Best of Both Worlds

Ridge (L2) + **Lasso** (L1) = **Elastic Net** Combined Power

Cost Function:

$$RSS + \lambda_1 \sum \beta_i^2 + \lambda_2 \sum |\beta_i|$$

- ✓ Gets benefits of **both methods**
- **Feature selection** like Lasso
- **Stability** like Ridge
- Useful when predictors are **highly correlated**

Hyperparameters: α (mixing) and λ (strength)

$\alpha = 0$	$0 < \alpha < 1$	$\alpha = 1$
Ridge	Elastic Net	Lasso