

## Linear Model Interpretation

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_n x_n$$

$\beta_0$

Intercept

$\beta_i$

Coefficients

$x_i$

Features

### Coefficient Magnitude

Indicates feature importance

### Sign Direction

Shows positive/negative relationship

### Regularization

L1 (Lasso) for selection, L2 (Ridge) for stability

## Feature Coefficients

Age

+0.82

Income

+0.63

Education

+0.41

Distance

-0.55

Risk Score

-0.76

Positive Impact

Negative Impact