Regularization

Wednesday 1 May 2024 9:35 PM

Logistic Regression
- penalty
- l1_ratio
- $\lambda = \frac{1}{C}$ → $\downarrow C \uparrow \lambda$, $\uparrow C \downarrow \lambda$

$$L = -\frac{1}{n}\sum_{i=1}^{n} y_i \log \hat{y}_i + (1-y_i)\log(1-\hat{y}_i) \quad + \lambda\|\beta\|^2 \rightarrow L2$$

$$+ \lambda\|\beta\| \rightarrow L1$$

Apply gradient descent

Analysis → Wald's test

statsmodels → LogisticRegression [Learn Later]

AIC, BIC