SVC SOFT-MARGIN CLASSIFICATION

Slack variable: $\xi_i \geq 1$ says the observation is misclassified.

$0 < \xi_i < 1$ says the observation violates the margin but is not misclassified.

Objective Function $= \dfrac{1}{2} \| \omega \|^2 + C \left(\sum_i \xi_i \right)$

Parameters ↓

Hyperparameter controlling the penalty for misclassifcation

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