

Research of Sth

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Abstract

1. Introduction

2. Related work

3. Experiment

3.1. Experiment1

4. Summary

5. Opinion

6. Formula symbol

$\alpha \vec{w}$

$$L(\alpha, \omega) = \frac{1}{2} ||\vec{\omega}||^2 + \sum_{i=1}^n \alpha_i [z_i(\omega^t x_i + \omega_0) - 1]$$

$$\min_{\omega_0, \vec{\omega}} (\max_{\alpha} \mathbf{L}(\omega_0, \vec{\omega}, \alpha))$$

$$\frac{\partial L(\alpha, \omega)}{\partial \vec{\omega}} = 0$$

$$\vec{\omega} = \sum_{i=0}^n \alpha_i z_i \vec{x}_i$$

ω_0 to the function

$$\frac{\partial L(\alpha, \omega)}{\partial \vec{\omega}_0} = 0$$

$$\sum_{i=0}^n \alpha_i z_i = 0$$

$$\xi = \xi_1, \xi_2, \dots, \xi_n$$

$$f(\vec{\omega}, \xi) = \frac{1}{2} ||\omega||^2 + C \sum_{i=1}^n \xi_i$$

, subject to

$$\forall i, z_i(\vec{\omega}^t x_i + \omega_0) \geq 1 - \xi_i, \xi_i \geq 0$$

7. Figure

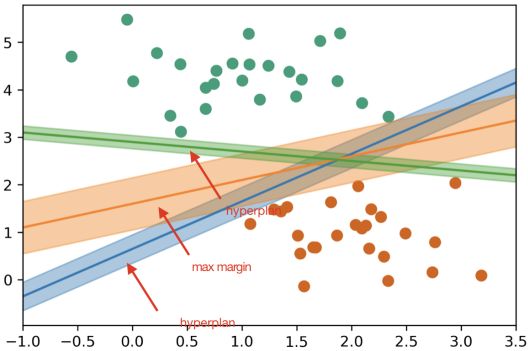


Figure 1. hyperplane candidates

8. Table

Name	Accuracy(C=1)	b
Primal	0.9713	3.1171
Dual	0.9167	1.0092

References

- [1] Advantage of svm.
- [2] Machine learning, 2017.
- [3] Support vector machine, August 2018.