

# Assignment

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# Support Vector Machine



Two samples,  $(0,1,1)$  and  $(-1,0,-1)$ , are given. Kernel is  $(\mathbf{x}_1 \cdot \mathbf{x}_2 + 1)^2$ , and  $C = \infty$ . We want to find out decision boundary by SVM with kernel.

- A. Find  $\alpha_1$  and  $\alpha_2$  in dual form.
- B. Which class does  $(1,1)$  belong to?

# Thank You