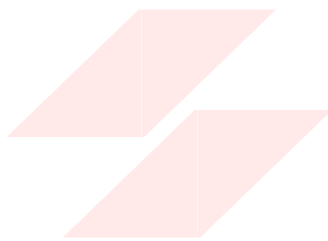


MACHINE LEARNING – WORKSHEET 7

1. (A) SVMs use hyperplanes as decision boundary for classification.
(B) SVMs uses kernel functions to avoid computational load of converting the whole dataset in to higher dimensional space where the data is linearly separable.
2. (B) Blue
3. (A) The RBF is used to find the linear classifier for the data in to infinite dimensional space.
(B) Higher the value of gamma of RBF the more flexible the classifier curve becomes in the original dimensions.
(C) A very high value of gamma may lead to overfitting.
4. (B) A Soft Margin Linear classifier.
5. (B) The margin width will Increase.
6. (A) Figure A
7. (B) $D3 > D1 > D2$
8. (C) $\text{Gamma2} > \text{Gamma 1}$
9. (B) The model would consider only the points close to the hyperplane for modelling.
10. (A) A large number of misclassification would happen.



FLIP ROBO
