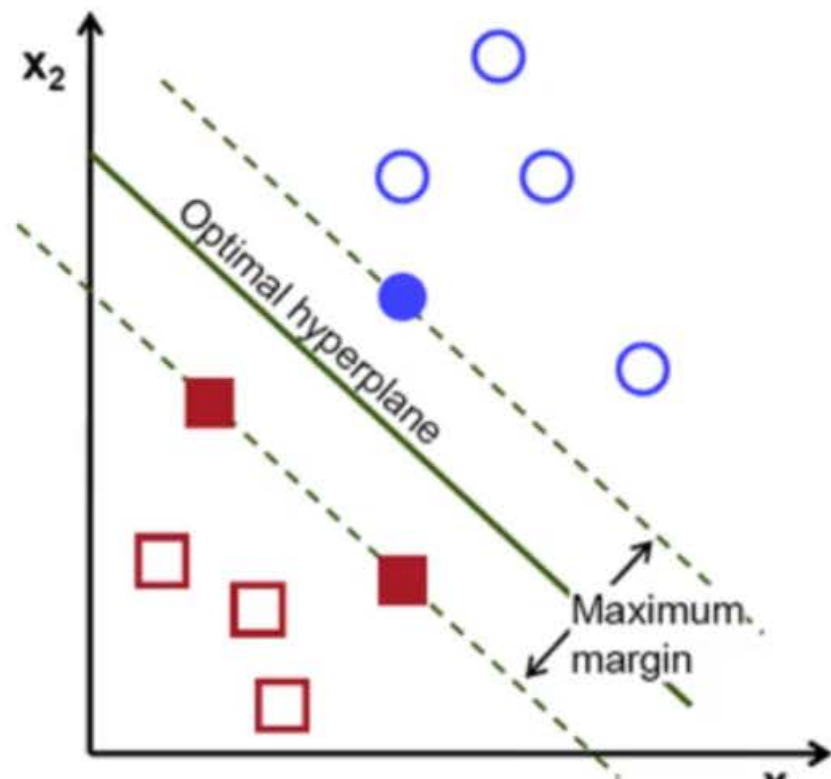
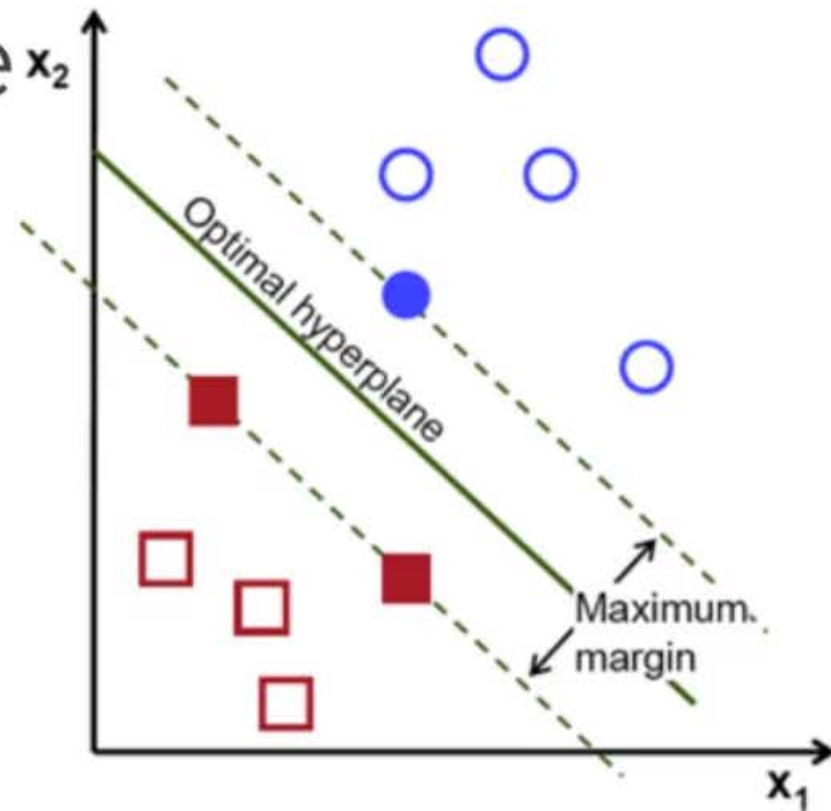


- Describe how the support vector machine (SVM) algorithm works.

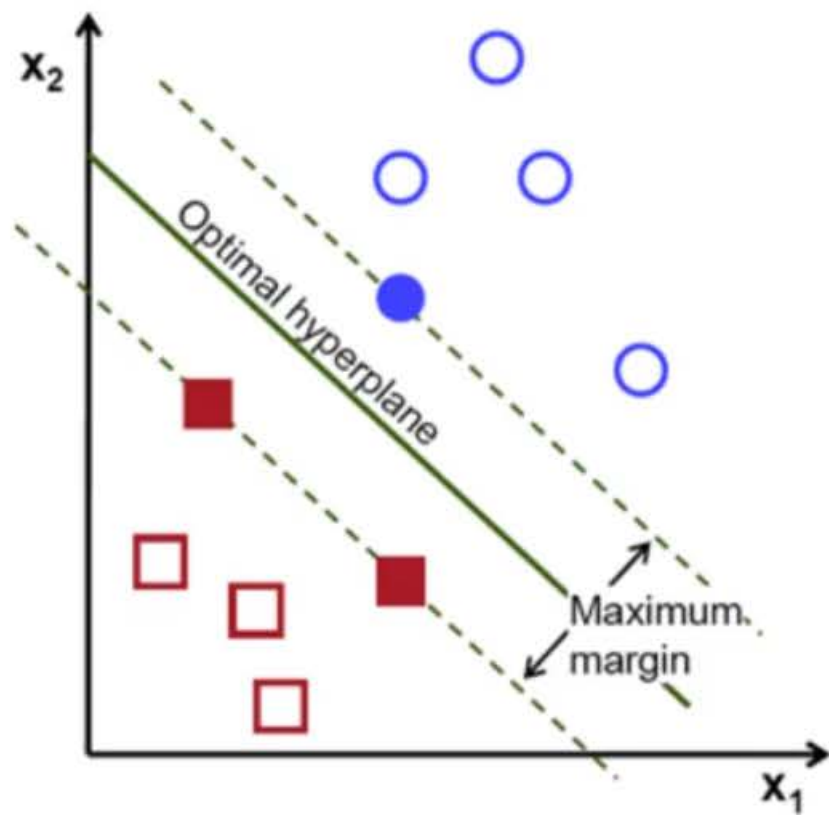
- SVM attempt to find a hyperplane that separates classes by maximizing the margin



- The filled in points in this diagram are the support vectors, against the decision hyperplane



- Here we show linear classification, but SVMs can perform nonlinear classification



- SVMs can employ the kernel trick which can map linear non-separable inputs into a higher dimension where they become more easily separable.