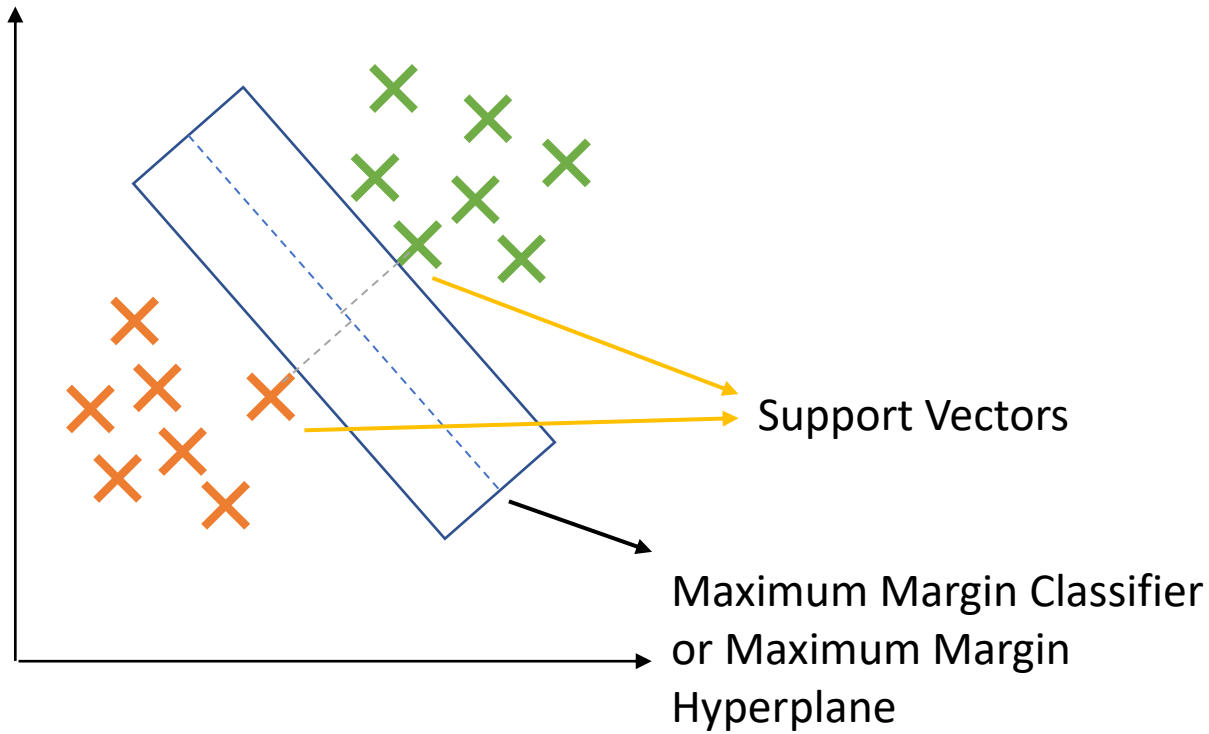
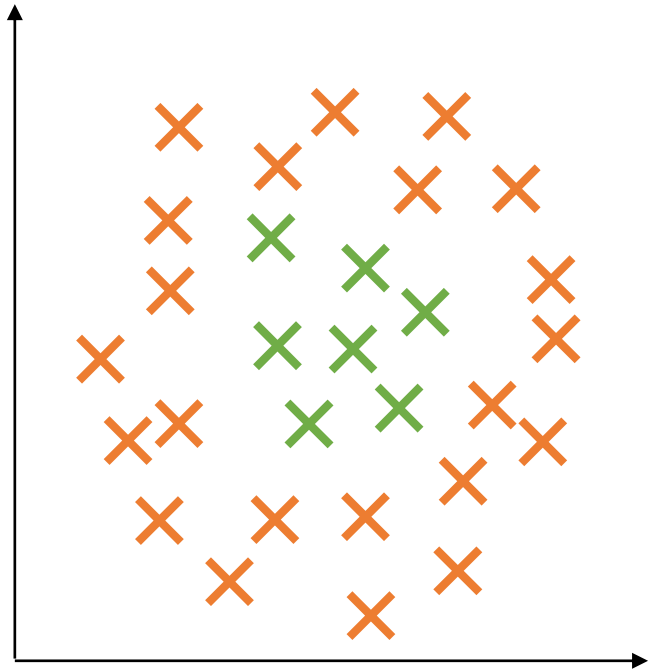
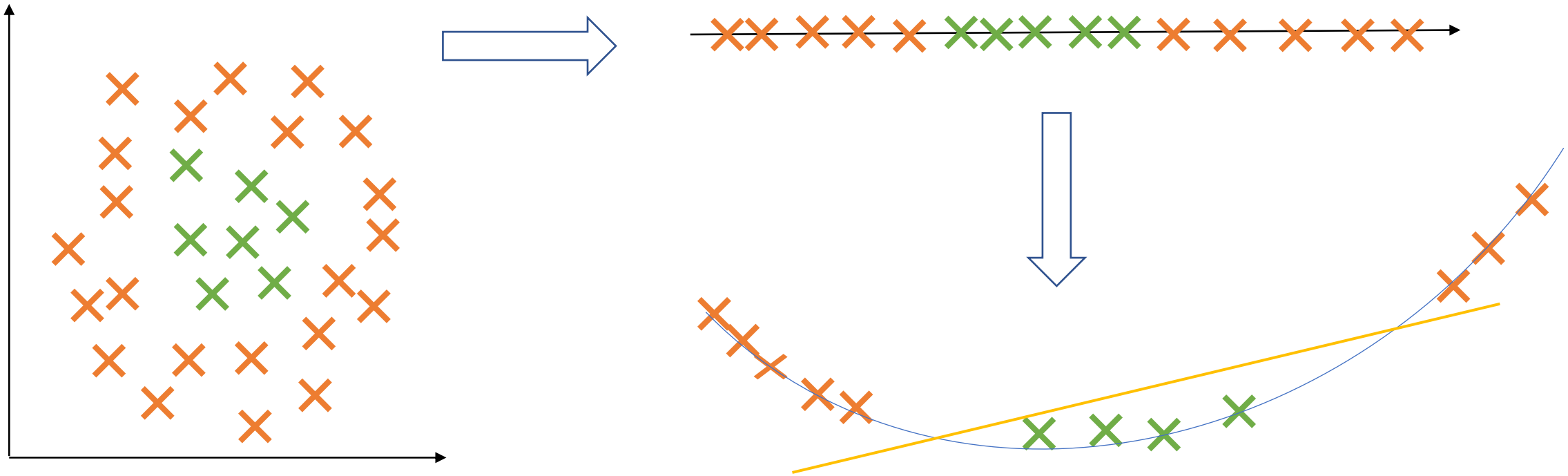
Kernelized Support Vector Machines: -







$$x_i = (B_1, B_2) \Rightarrow x_i = (B_1, B_2, Z)$$

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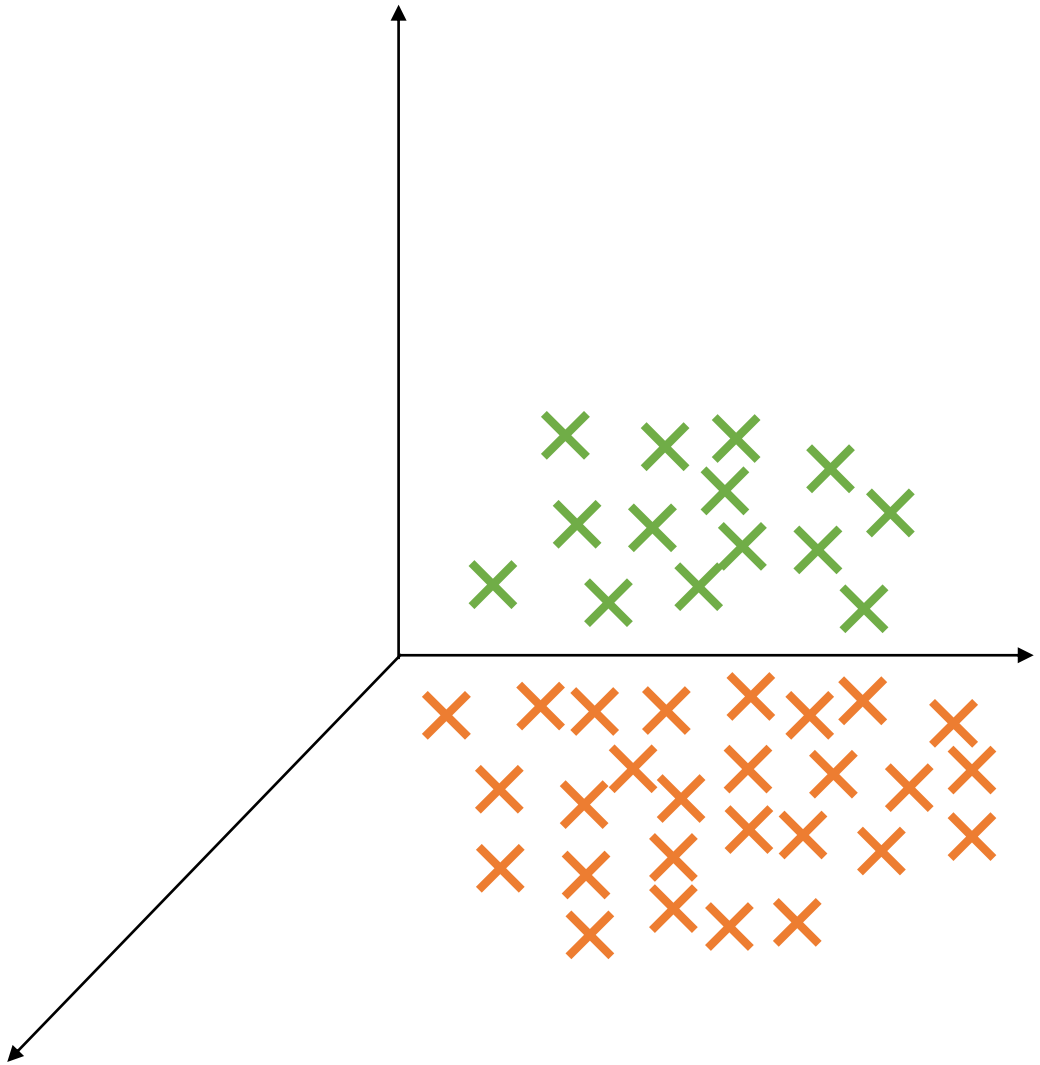

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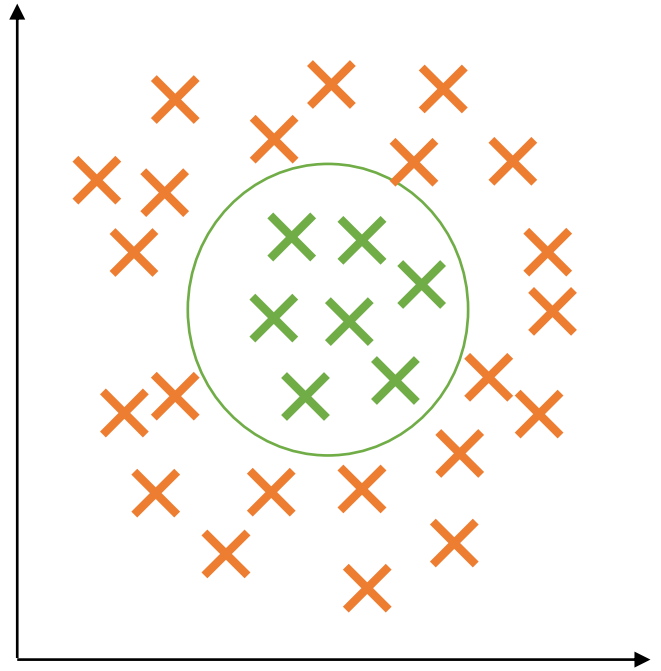

THARVAGURU

- In this a ‘rbf’ and a ‘poly’ kernel are used for sending the data into higher dimension.
- Similar to remaining models, a regularization parameter c is used in SVM.
- The strength of regularization is determined by C
- Larger values of C: less regularization

– Fit the training data as well as possible

– Each individual data point is important to classify correctly.

- Smaller values of C: more regularization – More tolerant of errors on individual data points
- Also another optimization parameter gamma is used to control the distribution of data.