## **POS** tagged Sentences

 When data are not labeled, supervised learning is not possible, and an unsupervised learning approach is required, which attempts to find natural clustering of the data to groups, and then map new data to these formed groups.

WRB When NNS data VBP are RB not VBN labeled,, JJ supervised NN learning VBZ is RB not JJ possible,, CC and DT an JJ unsupervised VBG learning NN approach VBZ is VBN required,, WDT which VBZ attempts TO to VB find JJ natural NN clustering IN of DT the NNS data IN to NNS groups,, CC and RB then VB map JJ new NNS data IN to DT these VBN formed NNS groups..

- Whereas the original problem may be stated in a finite dimensional space, it often happens that the sets to discriminate are not linearly separable in that space.
- IN Whereas DT the JJ original NN problem MD may VB be VBN stated IN in DT a JJ finite JJ dimensional NN space, PRP it RB often VBZ happens IN that DT the NNS sets TO to VB discriminate VBP are RB not RB linearly JJ separable IN in DT that NN space..

 Suppose some given data points each belong to one of two classes, and the goal is to decide which class a new data point will be in.

 VB Suppose DT some VBN given NNS data NNS points DT each VBP belong TO to CD one IN of CD two NNS classes,, CC and DT the NN goal VBZ is TO to VB decide WDT which NN class DT a JJ new NNS data NN point MD will VB be IN in..  If you wish to cite this work, please cite this publication.

 CC If PRP you VBP wish TO to VB cite DT this NN work, RB please VB cite DT this NN publication..  In machine learning, support vector machines are supervised learning models with associated learning algorithms that analyze data used for classification and regression analysis.

IN In NN machine NN learning, NN support NN vector NNS machines VBP are JJ supervised VBG learning NNS models IN with VBN associated VBG learning NN algorithms WDT that VBP analyze NNS data VBN used IN for NN classification CC and NN regression NN analysis..

 SVMs are helpful in text and hypertext categorization as their application can significantly reduce the need for labeled training instances in both the standard inductive and transductive settings.

NNP SVMs VBP are JJ helpful IN in NN text CC and NN hypertext NN categorization CC as PRP\$ their NN application MD can RB significantly VB reduce DT the NN need IN for VBN labeled NN training NNS instances IN in PDT both DT the NN standard NN inductive CC and NN transductive NNS settings..