

Q4-SVM/Ensemble Learning/HMM

- A) Using pair-wise separation technique, apply **SVM** for various values of **penalty factor** (c) on your dataset. Report the learning curve with total number of support vectors for all used c values. Compare results with Q1 Part A results.
- B) Apply SVM on the same problem presented in Q1 Part B, and compare results.
- C) Apply **Boosting** and **Bagging** techniques with all previously used classifiers and compare results of theirs with those of classifiers.
- D) Use **Hidden Markov Model** on the given dataset and report final achieved precision, and transition and emission matrices.

PUC-Rio dataset:

[UCI Machine Learning Repository: Wearable Computing: Classification of Body Postures and Movements \(PUC-Rio\) Data Set](#)

Useful hint:

<http://nl.mathworks.com/help/stats/hidden-markov-models.html>