Day 1:

Acquistion of dataset from [link]. Preprocessig and cleaning of data into libsvm format

Inferences:

Data must be free from null values .Rows containing Missing data was deleted ie excluded.

Without removal training yielded wrong results.

Day 2 :

Train using 2015 data test using 2014 data with different types of kernel .

Linear

Polynomial

RBF kernel

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Data Type | | | Normalised | Accuracy | CV Accuracy | nSV | Confusion matrix | Time in s |
| Train | | Test |  |  |  |  |  |  |
| 15 | 14 | | No | 84.41 | 89.40 | 104 | 252 19;  34 35; | 89.77 |
| 15 | 14 | | Yes both | 21.17 | 89.13 | 104 | 3 268;  0 69 | 101.96 |
| 15 | 14 | | Only grid search | 85.88 | 89.13 | 95 | 259 12  36 33 | 101.55 |
| 14 | 13 | | No | 81.09 | 88.07 | 190 | 259 31  29 37 | 391 |
| 14 | 13 | | Yes both | 18.08 | 88.22 | 205 | 0 290  0 66 | 744.93 |
| 14 | 13 | | Only grid search | 78.90 | 88.22 | 648 | 287 3  65 1 | 721.48 |
| 13 | 12 | | No | 92.81 | 87.23 | 303 | 306 8  17 17 | 299 |
| 12 | 11 | | No | 83.43 | 88.8 | 439 | 251 10  43 16 | 554 |
| 11 | 10 | | No | 85.75 | 88.37 | 452 | 260 15  35 41 | 955.5 |