=== Run information ===

Scheme: weka.classifiers.functions.LibSVM -S 0 -K 2 -D 3 -G 0.0 -R 0.0 -N 0.5 -M 40.0 -C 1.0 -E 0.001 -P 0.1 -model "C:\\Program Files\\Weka-3-8-5" -seed 1

Relation: KDDTrain20P\_05A.arff-weka.filters.unsupervised.attribute.Remove-R42-weka.filters.unsupervised.attribute.RemoveUseless-M99.0-weka.filters.unsupervised.attribute.SortLabels-R2-SNON-CASE-weka.filters.unsupervised.attribute.OrdinalToNumeric-R2-4-weka.filters.unsupervised.attribute.MathExpression-E(A-MEAN)/SD-weka.filters.unsupervised.attribute.Remove-V-R5,3,28,4,6,27,33,21,31,32,36,23,37,24,12,35,34,30,22,29,38,last

Instances: 25192

Attributes: 22

src\_bytes

service

diff\_srv\_rate

flag

dst\_bytes

same\_srv\_rate

dst\_host\_diff\_srv\_rate

count

dst\_host\_srv\_count

dst\_host\_same\_srv\_rate

dst\_host\_serror\_rate

serror\_rate

dst\_host\_srv\_serror\_rate

srv\_serror\_rate

logged\_in

dst\_host\_srv\_diff\_host\_rate

dst\_host\_same\_src\_port\_rate

dst\_host\_count

srv\_count

srv\_diff\_host\_rate

dst\_host\_rerror\_rate

class

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

LibSVM wrapper, original code by Yasser EL-Manzalawy (= WLSVM)

Time taken to build model: 16.26 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 24630 97.7691 %

Incorrectly Classified Instances 562 2.2309 %

Kappa statistic 0.9607

Mean absolute error 0.0089

Root mean squared error 0.0945

Relative absolute error 3.8976 %

Root relative squared error 27.9213 %

Total Number of Instances 25192

=== Detailed Accuracy By Class ===

TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class

0.994 0.040 0.966 0.994 0.980 0.957 0.977 0.963 normal

0.972 0.001 0.998 0.972 0.985 0.976 0.985 0.980 dos

0.584 0.000 0.910 0.584 0.711 0.727 0.792 0.535 r2l

0.943 0.003 0.974 0.943 0.958 0.954 0.970 0.924 probe

0.000 0.000 ? 0.000 ? ? 0.500 0.000 u2r

Weighted Avg. 0.978 0.022 ? 0.978 ? ? 0.978 0.962

=== Confusion Matrix ===

a b c d e <-- classified as

13375 10 11 53 0 | a = normal

255 8974 0 5 0 | b = dos

85 2 122 0 0 | c = r2l

125 5 0 2159 0 | d = probe

10 0 1 0 0 | e = u2r