=== 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,last

Instances: 25192

Attributes: 18

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

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: 6.28 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 24529 97.3682 %

Incorrectly Classified Instances 663 2.6318 %

Kappa statistic 0.9536

Mean absolute error 0.0105

Root mean squared error 0.1026

Relative absolute error 4.5981 %

Root relative squared error 30.3266 %

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 0.049 0.959 0.994 0.976 0.948 0.972 0.956 normal

0.966 0.001 0.998 0.966 0.982 0.972 0.982 0.977 dos

0.589 0.000 0.918 0.589 0.717 0.733 0.794 0.544 r2l

0.928 0.003 0.971 0.928 0.949 0.944 0.963 0.908 probe

0.000 0.000 ? 0.000 ? ? 0.500 0.000 u2r

Weighted Avg. 0.974 0.027 ? 0.974 ? ? 0.974 0.955

=== Confusion Matrix ===

a b c d e <-- classified as

13364 11 10 64 0 | a = normal

317 8917 0 0 0 | b = dos

86 0 123 0 0 | c = r2l

161 3 0 2125 0 | d = probe

10 0 1 0 0 | e = u2r