=== 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,last

Instances: 25192

Attributes: 19

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

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: 6.8 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 24557 97.4794 %

Incorrectly Classified Instances 635 2.5206 %

Kappa statistic 0.9556

Mean absolute error 0.0101

Root mean squared error 0.1004

Relative absolute error 4.4039 %

Root relative squared error 29.6793 %

Total Number of Instances 25192

=== Detailed Accuracy By Class ===

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

0.993 0.046 0.961 0.993 0.977 0.950 0.974 0.958 normal

0.969 0.001 0.998 0.969 0.983 0.974 0.984 0.979 dos

0.589 0.000 0.918 0.589 0.717 0.733 0.794 0.544 r2l

0.930 0.003 0.969 0.930 0.949 0.944 0.963 0.908 probe

0.000 0.000 ? 0.000 ? ? 0.500 0.000 u2r

Weighted Avg. 0.975 0.025 ? 0.975 ? ? 0.975 0.957

=== Confusion Matrix ===

a b c d e <-- classified as

13358 14 10 67 0 | a = normal

286 8948 0 0 0 | b = dos

86 0 123 0 0 | c = r2l

158 3 0 2128 0 | d = probe

10 0 1 0 0 | e = u2r