=== 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,last

Instances: 25192

Attributes: 20

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

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: 5.33 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 24578 97.5627 %

Incorrectly Classified Instances 614 2.4373 %

Kappa statistic 0.957

Mean absolute error 0.0097

Root mean squared error 0.0987

Relative absolute error 4.2583 %

Root relative squared error 29.1844 %

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 0.044 0.962 0.993 0.978 0.952 0.975 0.960 normal

0.971 0.001 0.998 0.971 0.984 0.976 0.985 0.980 dos

0.589 0.000 0.918 0.589 0.717 0.733 0.794 0.544 r2l

0.931 0.003 0.970 0.931 0.950 0.945 0.964 0.909 probe

0.000 0.000 ? 0.000 ? ? 0.500 0.000 u2r

Weighted Avg. 0.976 0.024 ? 0.976 ? ? 0.976 0.959

=== Confusion Matrix ===

a b c d e <-- classified as

13360 12 10 67 0 | a = normal

271 8963 0 0 0 | b = dos

85 1 123 0 0 | c = r2l

155 2 0 2132 0 | d = probe

10 0 1 0 0 | e = u2r