```
/usr/bin/python /Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py
pima: nu=0.75, gamma=10
data size: 768
break_count: 748
train_size: 485.0
Confusion matrix:
[[ 65 203]
 [126 374]]
precision: 0.648180242634, recall: 0.748, f1-score: 0.69452181987
--------
Confusion matrix:
Prediction   -1    1
Target
-1          67  201
 1         128  372
precision: 0.649214659686, recall: 0.744, f1-score: 0.693383038211
---------
Confusion matrix:
Prediction   -1    1
Target
-1          65  203
 1         125  375
precision: 0.648788927336, recall: 0.75, f1-score: 0.69573283859

*** PROFILER RESULTS ***
incremental_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:145
)
function called 1 times

         12516 function calls in 0.776 seconds

   Ordered by: cumulative time, internal time, call count
   List reduced from 135 to 40 due to restriction <40>

   ncalls  tottime  percall  cumtime  percall filename:lineno(function)
        1    0.000    0.000    0.776    0.776 evaluation_2.py:145(incremental_ocsvm)
        1    0.390    0.390    0.444    0.444 ocsvm.py:98(increment)
        1    0.001    0.001    0.332    0.332 ocsvm.py:35(fit)
        1    0.013    0.013    0.331    0.331 ocsvm.py:62(alpha)
        1    0.000    0.000    0.309    0.309 coneprog.py:4159(qp)
        1    0.003    0.003    0.309    0.309 coneprog.py:1441(coneqp)
       12    0.000    0.000    0.272    0.023 coneprog.py:1984(kktsolver)
       12    0.008    0.001    0.272    0.023 misc.py:1389(factor)
       12    0.126    0.011    0.126    0.011 {cvxopt.base.gemm}
       12    0.109    0.009    0.109    0.009 {cvxopt.base.syrk}
       24    0.025    0.001    0.025    0.001 {cvxopt.lapack.potrf}
     1552    0.025    0.000    0.025    0.000 {min}
      140    0.022    0.000    0.022    0.000 {cvxopt.base.gemv}
       22    0.000    0.000    0.020    0.001 coneprog.py:2333(f4)
       23    0.001    0.000    0.019    0.001 misc.py:1489(solve)
       22    0.000    0.000    0.019    0.001 coneprog.py:2291(f4_no_ir)
        2    0.000    0.000    0.013    0.007 ocsvm.py:58(gram)
        2    0.000    0.000    0.013    0.007 pairwise.py:1164(pairwise_kernels)
        2    0.000    0.000    0.013    0.007 pairwise.py:949(_parallel_pairwise)
        2    0.006    0.003    0.013    0.007 pairwise.py:740(rbf_kernel)
     1318    0.009    0.000    0.009    0.000 {method 'dot' of 'numpy.ndarray' objects}
       24    0.000    0.000    0.008    0.000 coneprog.py:1900(fG)
       24    0.000    0.000    0.007    0.000 misc.py:801(sgemv)
        2    0.003    0.002    0.007    0.003 pairwise.py:136(euclidean_distances)
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 59       46   0.004   0.000   0.004   0.000 {cvxopt.blas.trsv}
 60        2   0.000   0.000   0.003   0.002 extmath.py:171(safe_sparse_dot)
 61        2   0.003   0.002   0.003   0.002 {numpy.core._dotblas.dot}
 62      138   0.002   0.000   0.003   0.000 numeric.py:966(outer)
 63        2   0.000   0.000   0.003   0.001 shape_base.py:179(vstack)
 64        2   0.003   0.001   0.003   0.001 {numpy.core.multiarray.concatenate}
 65     1518   0.003   0.000   0.003   0.000 {numpy.core.multiarray.where}
 66       12   0.002   0.000   0.002   0.000 {cvxopt.blas.trsm}
 67      426   0.002   0.000   0.002   0.000 {method 'remove' of 'list' objects}
 68      181   0.000   0.000   0.002   0.000 numeric.py:136(ones)
 69       11   0.001   0.000   0.001   0.000 misc.py:422(update_scaling)
 70      570   0.001   0.000   0.001   0.000 {numpy.core.multiarray.empty}
 71       12   0.000   0.000   0.001   0.000 coneprog.py:1847(fP)
 72       12   0.001   0.000   0.001   0.000 {cvxopt.base.symv}
 73        2   0.001   0.000   0.001   0.001 twodim_base.py:221(diag)
 74      913   0.001   0.000   0.001   0.000 {range}
 75
 76
 77
 78 *** PROFILER RESULTS ***
 79 cvxopt_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:141)
 80 function called 1 times
 81
 82         2530 function calls in 2.643 seconds
 83
 84    Ordered by: cumulative time, internal time, call count
 85    List reduced from 117 to 40 due to restriction <40>
 86
 87    ncalls  tottime  percall  cumtime  percall filename:lineno(function)
 88         1   0.000    0.000    2.643    2.643 evaluation_2.py:141(cvxopt_ocsvm)
 89         1   0.006    0.006    2.643    2.643 ocsvm.py:35(fit)
 90         1   0.090    0.090    2.635    2.635 ocsvm.py:62(alpha)
 91         1   0.003    0.003    2.497    2.497 coneprog.py:4159(qp)
 92         1   0.004    0.004    2.494    2.494 coneprog.py:1441(coneqp)
 93        13   0.000    0.000    2.350    0.181 coneprog.py:1984(kktsolver)
 94        13   0.045    0.003    2.350    0.181 misc.py:1389(factor)
 95        13   1.232    0.095    1.232    0.095 {cvxopt.base.syrk}
 96        13   0.808    0.062    0.808    0.062 {cvxopt.base.gemm}
 97        26   0.248    0.010    0.248    0.010 {cvxopt.lapack.potrf}
 98       152   0.101    0.001    0.101    0.001 {cvxopt.base.gemv}
 99        25   0.001    0.000    0.092    0.004 misc.py:1489(solve)
100        24   0.000    0.000    0.090    0.004 coneprog.py:2333(f4)
101        24   0.000    0.000    0.090    0.004 coneprog.py:2291(f4_no_ir)
102        26   0.000    0.000    0.033    0.001 coneprog.py:1900(fG)
103        26   0.001    0.000    0.033    0.001 misc.py:801(sgemv)
104         2   0.000    0.000    0.033    0.016 ocsvm.py:58(gram)
105         2   0.000    0.000    0.033    0.016 pairwise.py:1164(pairwise_kernels)
106         2   0.000    0.000    0.033    0.016 pairwise.py:949(_parallel_pairwise)
107         2   0.012    0.006    0.033    0.016 pairwise.py:740(rbf_kernel)
108        50   0.023    0.000    0.023    0.000 {cvxopt.blas.trsv}
109         2   0.008    0.004    0.020    0.010 pairwise.py:136(euclidean_distances)
110        13   0.016    0.001    0.016    0.001 {cvxopt.blas.trsm}
111         2   0.000    0.000    0.012    0.006 extmath.py:171(safe_sparse_dot)
112         2   0.012    0.006    0.012    0.006 {numpy.core._dotblas.dot}
113         2   0.000    0.000    0.011    0.006 shape_base.py:179(vstack)
114         2   0.011    0.005    0.011    0.005 {numpy.core.multiarray.concatenate}
115        13   0.000    0.000    0.006    0.000 coneprog.py:1847(fP)
116        13   0.006    0.000    0.006    0.000 {cvxopt.base.symv}
117         2   0.003    0.002    0.005    0.002 twodim_base.py:221(diag)
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118        12    0.003    0.000    0.003    0.000 misc.py:422(update_scaling)
119         1    0.000    0.000    0.001    0.001 ocsvm.py:45(rho)
120         4    0.001    0.000    0.001    0.000 {numpy.core.multiarray.zeros}
121        90    0.001    0.000    0.001    0.000 {range}
122        72    0.001    0.000    0.001    0.000 {cvxopt.misc_solvers.scale2}
123       221    0.001    0.000    0.001    0.000 {cvxopt.blas.axpy}
124         4    0.000    0.000    0.000    0.000 pairwise.py:57(check_pairwise_arrays)
125        28    0.000    0.000    0.000    0.000 {numpy.core.multiarray.array}
126         6    0.000    0.000    0.000    0.000 validation.py:268(check_array)
127        19    0.000    0.000    0.000    0.000 numeric.py:462(asanyarray)
128
129
130
131  *** PROFILER RESULTS ***
132  sklearn_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:137)
133  function called 1 times
134
135         57 function calls in 0.015 seconds
136
137     Ordered by: cumulative time, internal time, call count
138
139     ncalls  tottime  percall  cumtime  percall filename:lineno(function)
140          1    0.000    0.000    0.015    0.015 evaluation_2.py:137(sklearn_ocsvm)
141          1    0.000    0.000    0.015    0.015 classes.py:941(fit)
142          1    0.000    0.000    0.015    0.015 base.py:99(fit)
143          1    0.000    0.000    0.015    0.015 base.py:211(_dense_fit)
144          1    0.015    0.015    0.015    0.015 {sklearn.svm.libsvm.fit}
145          1    0.000    0.000    0.000    0.000 validation.py:268(check_array)
146          1    0.000    0.000    0.000    0.000 validation.py:43(_assert_all_finite)
147          1    0.000    0.000    0.000    0.000 {method 'sum' of 'numpy.ndarray' objects}
148          1    0.000    0.000    0.000    0.000 _methods.py:23(_sum)
149          1    0.000    0.000    0.000    0.000 {method 'reduce' of 'numpy.ufunc' objects}
150          1    0.000    0.000    0.000    0.000 validation.py:126(_shape_repr)
151          1    0.000    0.000    0.000    0.000 {method 'randint' of 'mtrand.RandomState'
     objects}
152          1    0.000    0.000    0.000    0.000 base.py:193(_validate_targets)
153          1    0.000    0.000    0.000    0.000 numeric.py:136(ones)
154          1    0.000    0.000    0.000    0.000 shape_base.py:60(atleast_2d)
155          5    0.000    0.000    0.000    0.000 {numpy.core.multiarray.array}
156          1    0.000    0.000    0.000    0.000 {method 'join' of 'str' objects}
157          2    0.000    0.000    0.000    0.000 {numpy.core.multiarray.empty}
158          1    0.000    0.000    0.000    0.000 getlimits.py:244(__init__)
159          2    0.000    0.000    0.000    0.000 numeric.py:392(asarray)
160          1    0.000    0.000    0.000    0.000 {numpy.core.multiarray.copyto}
161          3    0.000    0.000    0.000    0.000 validation.py:153(<genexpr>)
162          1    0.000    0.000    0.000    0.000 validation.py:105(_num_samples)
163          1    0.000    0.000    0.000    0.000 {method 'copy' of 'numpy.ndarray' objects}
164          1    0.000    0.000    0.000    0.000 {sklearn.svm.libsvm.set_verbosity_wrap}
165          2    0.000    0.000    0.000    0.000 base.py:702(isspmatrix)
166          2    0.000    0.000    0.000    0.000 numeric.py:462(asanyarray)
167          6    0.000    0.000    0.000    0.000 {len}
168          3    0.000    0.000    0.000    0.000 {hasattr}
169          1    0.000    0.000    0.000    0.000 validation.py:503(check_random_state)
170          3    0.000    0.000    0.000    0.000 {isinstance}
171          1    0.000    0.000    0.000    0.000 base.py:203(_warn_from_fit_status)
172          1    0.000    0.000    0.000    0.000 getlimits.py:269(max)
173          2    0.000    0.000    0.000    0.000 {callable}
174          1    0.000    0.000    0.000    0.000 {method 'append' of 'list' objects}
175          1    0.000    0.000    0.000    0.000 {method 'disable' of '_lsprof.Profiler' objects}
```

```
176         1    0.000    0.000    0.000    0.000 {method 'index' of 'list' objects}
177         0    0.000             0.000          profile:0(profiler)
178
179
180
181   Process finished with exit code 0
182
```