```
/usr/bin/python /Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py
ecoli1: nu=0.75, gamma=30
data size: 306
break_count: 286
train_size: 193.0
Confusion matrix:
[[ 19  62]
 [ 60 165]]
precision: 0.726872246696, recall: 0.733333333333, f1-score: 0.730088495575
--------
Confusion matrix:
Prediction  -1    1
Target
-1          19   62
 1          60  165
precision: 0.726872246696, recall: 0.733333333333, f1-score: 0.730088495575
---------
Confusion matrix:
Prediction  -1    1
Target
-1          18   63
 1          60  165
precision: 0.723684210526, recall: 0.733333333333, f1-score: 0.728476821192

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

         6269 function calls in 0.125 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    0.125    0.125 evaluation_2.py:145(incremental_ocsvm)
        1    0.082    0.082    0.094    0.094 ocsvm.py:98(increment)
        1    0.000    0.000    0.031    0.031 ocsvm.py:35(fit)
        1    0.002    0.002    0.031    0.031 ocsvm.py:62(alpha)
        1    0.000    0.000    0.028    0.028 coneprog.py:4159(qp)
        1    0.002    0.002    0.027    0.027 coneprog.py:1441(coneqp)
       13    0.000    0.000    0.018    0.001 coneprog.py:1984(kktsolver)
       13    0.002    0.000    0.018    0.001 misc.py:1389(factor)
       13    0.008    0.001    0.008    0.001 {cvxopt.base.syrk}
       26    0.005    0.000    0.005    0.000 {cvxopt.lapack.potrf}
      652    0.004    0.000    0.004    0.000 {min}
      152    0.003    0.000    0.003    0.000 {cvxopt.base.gemv}
       24    0.000    0.000    0.003    0.000 coneprog.py:2333(f4)
       24    0.000    0.000    0.003    0.000 coneprog.py:2291(f4_no_ir)
       25    0.000    0.000    0.003    0.000 misc.py:1489(solve)
        2    0.000    0.000    0.003    0.001 ocsvm.py:58(gram)
        2    0.000    0.000    0.003    0.001 pairwise.py:1164(pairwise_kernels)
        2    0.000    0.000    0.003    0.001 pairwise.py:949(_parallel_pairwise)
        2    0.001    0.000    0.003    0.001 pairwise.py:740(rbf_kernel)
      471    0.002    0.000    0.002    0.000 {method 'dot' of 'numpy.ndarray' objects}
       13    0.002    0.000    0.002    0.000 {cvxopt.base.gemm}
       26    0.000    0.000    0.002    0.000 coneprog.py:1900(fG)
       26    0.000    0.000    0.002    0.000 misc.py:801(sgemv)
        2    0.001    0.000    0.001    0.001 pairwise.py:136(euclidean_distances)
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 59      113   0.000   0.000   0.001   0.000 numeric.py:136(ones)
 60      615   0.001   0.000   0.001   0.000 {numpy.core.multiarray.where}
 61       12   0.001   0.000   0.001   0.000 misc.py:422(update_scaling)
 62       39   0.001   0.000   0.001   0.000 numeric.py:966(outer)
 63        2   0.000   0.000   0.001   0.000 extmath.py:171(safe_sparse_dot)
 64        2   0.001   0.000   0.001   0.000 {numpy.core._dotblas.dot}
 65        1   0.001   0.001   0.001   0.001 misc.py:20(<module>)
 66      266   0.001   0.000   0.001   0.000 {numpy.core.multiarray.empty}
 67      113   0.000   0.000   0.000   0.000 {numpy.core.multiarray.copyto}
 68        2   0.000   0.000   0.000   0.000 shape_base.py:179(vstack)
 69       50   0.000   0.000   0.000   0.000 {cvxopt.blas.trsv}
 70      195   0.000   0.000   0.000   0.000 {method 'remove' of 'list' objects}
 71      101   0.000   0.000   0.000   0.000 {numpy.core.multiarray.array}
 72       13   0.000   0.000   0.000   0.000 {cvxopt.blas.trsm}
 73        4   0.000   0.000   0.000   0.000 pairwise.py:57(check_pairwise_arrays)
 74       13   0.000   0.000   0.000   0.000 coneprog.py:1847(fP)
 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         2362 function calls in 0.252 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    0.252    0.252 evaluation_2.py:141(cvxopt_ocsvm)
 89          1    0.001    0.001    0.252    0.252 ocsvm.py:35(fit)
 90          1    0.009    0.009    0.250    0.250 ocsvm.py:62(alpha)
 91          1    0.000    0.000    0.234    0.234 coneprog.py:4159(qp)
 92          1    0.003    0.003    0.234    0.234 coneprog.py:1441(coneqp)
 93         12    0.000    0.000    0.201    0.017 coneprog.py:1984(kktsolver)
 94         12    0.008    0.001    0.201    0.017 misc.py:1389(factor)
 95         12    0.095    0.008    0.095    0.008 {cvxopt.base.gemm}
 96         12    0.074    0.006    0.074    0.006 {cvxopt.base.syrk}
 97         24    0.022    0.001    0.022    0.001 {cvxopt.lapack.potrf}
 98        140    0.019    0.000    0.019    0.000 {cvxopt.base.gemv}
 99         22    0.000    0.000    0.016    0.001 coneprog.py:2333(f4)
100         23    0.001    0.000    0.016    0.001 misc.py:1489(solve)
101         22    0.000    0.000    0.016    0.001 coneprog.py:2291(f4_no_ir)
102         24    0.000    0.000    0.006    0.000 coneprog.py:1900(fG)
103         24    0.000    0.000    0.006    0.000 misc.py:801(sgemv)
104          2    0.000    0.000    0.005    0.002 ocsvm.py:58(gram)
105          2    0.000    0.000    0.005    0.002 pairwise.py:1164(pairwise_kernels)
106          2    0.000    0.000    0.005    0.002 pairwise.py:949(_parallel_pairwise)
107          2    0.002    0.001    0.005    0.002 pairwise.py:740(rbf_kernel)
108         46    0.003    0.000    0.003    0.000 {cvxopt.blas.trsv}
109          2    0.001    0.001    0.003    0.001 pairwise.py:136(euclidean_distances)
110          2    0.000    0.000    0.002    0.001 shape_base.py:179(vstack)
111         12    0.002    0.000    0.002    0.000 {cvxopt.blas.trsm}
112          2    0.002    0.001    0.002    0.001 {numpy.core.multiarray.concatenate}
113         11    0.001    0.000    0.002    0.000 misc.py:422(update_scaling)
114          2    0.000    0.000    0.001    0.001 extmath.py:171(safe_sparse_dot)
115          2    0.001    0.001    0.001    0.001 {numpy.core._dotblas.dot}
116         12    0.000    0.000    0.001    0.000 coneprog.py:1847(fP)
117         12    0.001    0.000    0.001    0.000 {cvxopt.base.symv}
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118        24    0.000    0.000    0.001    0.000 coneprog.py:1919(fA)
119         2    0.001    0.000    0.001    0.000 twodim_base.py:221(diag)
120         1    0.000    0.000    0.001    0.001 ocsvm.py:45(rho)
121       203    0.001    0.000    0.001    0.000 {cvxopt.blas.axpy}
122        83    0.000    0.000    0.000    0.000 {range}
123        66    0.000    0.000    0.000    0.000 {cvxopt.misc_solvers.scale2}
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 0.002 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    0.002    0.002 evaluation_2.py:137(sklearn_ocsvm)
141         1    0.000    0.000    0.002    0.002 classes.py:941(fit)
142         1    0.000    0.000    0.002    0.002 base.py:99(fit)
143         1    0.000    0.000    0.002    0.002 base.py:211(_dense_fit)
144         1    0.002    0.002    0.002    0.002 {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 validation.py:126(_shape_repr)
148         1    0.000    0.000    0.000    0.000 {method 'sum' of 'numpy.ndarray' objects}
149         1    0.000    0.000    0.000    0.000 _methods.py:23(_sum)
150         1    0.000    0.000    0.000    0.000 numeric.py:136(ones)
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 {method 'reduce' of 'numpy.ufunc' objects}
153         1    0.000    0.000    0.000    0.000 base.py:193(_validate_targets)
154         1    0.000    0.000    0.000    0.000 shape_base.py:60(atleast_2d)
155         1    0.000    0.000    0.000    0.000 {method 'join' of 'str' objects}
156         2    0.000    0.000    0.000    0.000 numeric.py:392(asarray)
157         5    0.000    0.000    0.000    0.000 {numpy.core.multiarray.array}
158         2    0.000    0.000    0.000    0.000 {numpy.core.multiarray.empty}
159         1    0.000    0.000    0.000    0.000 getlimits.py:244(__init__)
160         3    0.000    0.000    0.000    0.000 validation.py:153(<genexpr>)
161         1    0.000    0.000    0.000    0.000 validation.py:105(_num_samples)
162         1    0.000    0.000    0.000    0.000 {sklearn.svm.libsvm.set_verbosity_wrap}
163         1    0.000    0.000    0.000    0.000 {numpy.core.multiarray.copyto}
164         2    0.000    0.000    0.000    0.000 numeric.py:462(asanyarray)
165         2    0.000    0.000    0.000    0.000 base.py:702(isspmatrix)
166         3    0.000    0.000    0.000    0.000 {isinstance}
167         3    0.000    0.000    0.000    0.000 {hasattr}
168         1    0.000    0.000    0.000    0.000 {method 'copy' of 'numpy.ndarray' objects}
169         1    0.000    0.000    0.000    0.000 getlimits.py:269(max)
170         2    0.000    0.000    0.000    0.000 {callable}
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 {method 'append' of 'list' objects}
173         1    0.000    0.000    0.000    0.000 validation.py:503(check_random_state)
174         6    0.000    0.000    0.000    0.000 {len}
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
```