```
/usr/bin/python /Users/LT/Documents/Uni/MA/increOCSVM/evaluation 2.py
    ecoli1: nu=0.5, gamma=10
   data size: 306
   break_count: 286
    train_size: 129.0
    Confusion matrix:
    [[ 38 43]
    [119 106]]
    precision: 0.711409395973, recall: 0.471111111111, f1-score: 0.566844919786
10
11
    Confusion matrix:
12
    Prediction -1 1
13
    Target
14
            38 43
   -1
15
    1
            119 106
   precision: 0.711409395973, recall: 0.471111111111, f1-score: 0.566844919786
16
17
18
   Confusion matrix:
19
    Prediction -1
20
   Target
21
22
            37 44
    -1
            119 106
    1
23
    precision: 0.706666666667, recall: 0.471111111111, f1-score: 0.565333333333
24
25
    *** PROFILER RESULTS ***
26
    incremental_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:145
27
    function called 1 times
28
29
          10028 function calls in 0.289 seconds
30
31
      Ordered by: cumulative time, internal time, call count
32
      List reduced from 135 to 40 due to restriction <40>
33
34
     ncalls tottime percall cumtime percall filename:lineno(function)
35
         1
            0.000
                    0.000
                           0.289
                                   0.289 evaluation_2.py:145(incremental_ocsvm)
36
         1
            0.246
                           0.269
                                   0.269 ocsvm.py:98(increment)
                    0.246
37
            0.000
                          0.020
                                   0.020 ocsvm.py:35(fit)
         1
                   0.000
38
                           0.020
                                   0.020 ocsvm.py:62(alpha)
         1
            0.001
                    0.001
                                   0.018 coneprog.py:4159(qp)
39
            0.000
                    0.000
                           0.018
         1
40
         1
                    0.002
                                   0.018 coneprog.py:1441(coneqp)
            0.002
                            0.018
                                    0.001 coneprog.py:1984(kktsolver)
0.001 misc.py:1389(factor)
41
        12
            0.000
                    0.000
                            0.012
        12
                            0.012
42
             0.001
                    0.000
43
       1290
             0.008 0.000
                             0.008
                                     0.000 \{ \min \}
44
        24
             0.006
                    0.000
                            0.006
                                    0.000 {cvxopt.lapack.potrf}
       998
45
             0.005
                    0.000
                            0.005
                                    0.000 {method 'dot' of 'numpy.ndarray' objects}
46
        12
             0.004
                    0.000
                            0.004
                                    0.000 {cvxopt.base.syrk}
47
         2
            0.000
                    0.000
                            0.002
                                    0.001 ocsvm.py:58(gram)
         2
2
48
                           0.002
            0.000
                    0.000
                                    0.001 pairwise.py:1164(pairwise_kernels)
49
                            0.002
            0.000
                    0.000
                                    0.001 pairwise.py:949(_parallel_pairwise)
         \overline{2}
50
                    0.000
                            0.002
                                   0.001 pairwise.py:740(rbf_kernel)
            0.001
51
        84
            0.002
                    0.000
                            0.002
                                    0.000 numeric.py:966(outer)
       1256
             0.002 0.000
52
                             0.002
                                     0.000 {numpy.core.multiarray.where}
53
             0.000 0.000
       212
                            0.002
                                    0.000 numeric.py:136(ones)
                    0.000
54
        22
             0.000
                            0.002
                                    0.000 coneprog.py:2333(f4)
55
        22
                            0.002
             0.000
                    0.000
                                    0.000 coneprog.py:2291(f4_no_ir)
56
        23
                            0.001
                                    0.000 misc.py:1489(solve)
             0.000
                    0.000
57
        140
             0.001
                     0.000
                             0.001
                                     0.000 {cvxopt.base.gemv}
58
       529
             0.001
                     0.000
                             0.001
                                     0.000 {numpy.core.multiarray.empty}
```

File - unknown

```
0.001
                     0.000 0.001
                                    0.001 pairwise.py:136(euclidean_distances)
 59
         2
 60
        212
              0.001
                      0.000
                             0.001
                                     0.000 {numpy.core.multiarray.copyto}
 61
         12
              0.001
                     0.000
                             0.001
                                     0.000 {cvxopt.base.gemm}
                     0.000
 62
        394
              0.001
                             0.001
                                     0.000 {method 'remove' of 'list' objects}
 63
         24
                             0.001
              0.000
                     0.000
                                     0.000 coneprog.py:1900(fG)
 64
         24
             0.000
                     0.000
                             0.001
                                     0.000 misc.py:801(sgemv)
                             0.001
 65
             0.000
                     0.000
                                     0.000 misc.py:422(update_scaling)
         11
 66
         1
             0.001
                     0.001
                            0.001
                                    0.001 misc.py:20(<module>)
                     0.000
 67
        669
              0.001
                             0.001
                                     0.000 {range}
                     0.000
                            0.000
 68
             0.000
                                    0.000 extmath.py:171(safe_sparse_dot)
 69
         2
             0.000
                     0.000
                            0.000
                                    0.000 {numpy.core._dotblas.dot}
 70
         172
              0.000 0.000
                             0.000
                                     0.000 numeric.py:392(asarray)
         191
 71
              0.000 0.000
                              0.000
                                     0.000 {numpy.core.multiarray.array}
 72
         4
             0.000
                    0.000
                            0.000
                                    0.000 pairwise.py:57(check_pairwise_arrays)
 73
         2
             0.000
                     0.000
                            0.000
                                    0.000 shape_base.py:179(vstack)
 74
             0.000
                     0.000
                            0.000
                                    0.000 validation.py:268(check_array)
 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
          2026 function calls in 0.136 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
             0.000
                    0.000
                            0.136
                                    0.136 evaluation_2.py:141(cvxopt_ocsvm)
         1
 89
         1
             0.001
                     0.001
                            0.136
                                    0.136 ocsvm.py:35(fit)
 90
         1
             0.006
                     0.006
                            0.135
                                    0.135 ocsvm.py:62(alpha)
 91
                     0.000
                            0.123
         1
             0.000
                                    0.123 coneprog.py:4159(qp)
 92
                            0.123
                     0.002
                                    0.123 coneprog.py:1441(coneqp)
         1
             0.002
 93
                             0.104
                                    0.010 coneprog.py:1984(kktsolver)
             0.000
         10
                     0.000
 94
         10
             0.005
                     0.000
                             0.104
                                     0.010 misc.py:1389(factor)
 95
             0.049
                     0.005
                             0.049
                                     0.005 {cvxopt.base.gemm}
         10
 96
             0.038
                             0.038
         10
                     0.004
                                     0.004 {cvxopt.base.syrk}
 97
              0.012
         20
                     0.001
                             0.012
                                     0.001 {cvxopt.lapack.potrf}
 98
        116
              0.010
                     0.000
                             0.010
                                     0.000 {cvxopt.base.gemv}
 99
              0.000
                     0.000
                             0.009
                                     0.000 coneprog.py:2333(f4)
         18
         19
100
              0.000
                     0.000
                             0.009
                                     0.000 misc.py:1489(solve)
101
         18
              0.000
                     0.000
                             0.009
                                     0.000 coneprog.py:2291(f4_no_ir)
                             0.004
102
         20
              0.000
                     0.000
                                     0.000 coneprog.py:1900(fG)
                     0.000
                             0.004
103
         20
             0.000
                                     0.000 misc.py:801(sgemv)
104
             0.000
                     0.000
                            0.004
                                    0.002 ocsvm.py:58(gram)
         2
105
             0.000
                     0.000
                            0.004
                                    0.002 pairwise.py:1164(pairwise_kernels)
106
             0.000
                     0.000
                            0.004
                                    0.002 pairwise.py:949(_parallel_pairwise)
         2
107
             0.001
                     0.001
                            0.004
                                    0.002 pairwise.py:740(rbf_kernel)
         2
108
             0.001
                     0.000
                            0.002
                                    0.001 pairwise.py:136(euclidean_distances)
                             0.002
109
         38
                     0.000
             0.002
                                     0.000 {cvxopt.blas.trsv}
110
         2
             0.000
                     0.000
                            0.002
                                    0.001 shape_base.py:179(vstack)
         2
             0.001
                     0.001
                            0.001
111
                                    0.001 {numpy.core.multiarray.concatenate}
         9
2
112
             0.001
                     0.000
                            0.001
                                    0.000 misc.py:422(update_scaling)
             0.000
                     0.000
                            0.001
113
                                    0.001 extmath.py:171(safe_sparse_dot)
         2
114
             0.001
                     0.001
                             0.001
                                    0.001 {numpy.core._dotblas.dot}
         1
115
                            0.001
             0.000
                     0.000
                                    0.001 ocsvm.py:45(rho)
         10
                             0.001
116
             0.001
                     0.000
                                     0.000 {cvxopt.blas.trsm}
117
         10
             0.000
                     0.000
                             0.001
                                     0.000 coneprog.py:1847(fP)
```

File - unknown

```
0.001
                      0.000
                              0.001
                                      0.000 {cvxopt.base.symv}
118
          10
119
          2
             0.001
                     0.000
                             0.001
                                     0.000 twodim base.py:221(diag)
120
          4
             0.000
                     0.000
                             0.000
                                     0.000 pairwise.py:57(check_pairwise_arrays)
                             0.000
121
          6
             0.000
                     0.000
                                     0.000 validation.py:268(check_array)
              0.000
122
         28
                              0.000
                      0.000
                                      0.000 {numpy.core.multiarray.array}
123
         167
              0.000 \quad 0.000
                              0.000
                                      0.000 {cvxopt.blas.axpy}
124
         19
              0.000
                      0.000
                              0.000
                                      0.000 numeric.py:462(asanyarray)
125
         69
              0.000
                      0.000
                              0.000
                                      0.000 {range}
                              0.000
126
         10
              0.000
                      0.000
                                      0.000 shape_base.py:60(atleast_2d)
127
         54
              0.000
                      0.000
                              0.000
                                      0.000 {cvxopt.misc_solvers.scale2}
128
129
130
     *** PROFILER RESULTS ***
131
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
                     0.000
             0.000
                             0.002
                                     0.002 evaluation_2.py:137(sklearn_ocsvm)
          1
                                     0.002 classes.py:941(fit)
141
          1
             0.000
                     0.000
                             0.002
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 base.py:193(_validate_targets)
             0.000
                     0.000
                             0.000
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
             0.000
                     0.000
                             0.000
          1
                                     0.000 validation.py:126(_shape_repr)
                             0.000
                                     0.000 numeric.py:136(ones)
151
          1
             0.000
                     0.000
152
             0.000
                             0.000
          1
                     0.000
                                     0.000 {method 'reduce' of 'numpy.ufunc' objects}
                                     0.000 {method 'randint' of 'mtrand.RandomState'
153
          1
              0.000
                     0.000
                             0.000
     objects}
154
             0.000
                     0.000
                             0.000
          1
                                     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}
          1
158
             0.000
                             0.000
                                     0.000 getlimits.py:244(__init__)
                     0.000
          2
159
                                     0.000 numeric.py:392(asarray)
             0.000
                     0.000
                             0.000
          \overline{3}
160
             0.000
                     0.000
                             0.000
                                     0.000 validation.py:153(<genexpr>)
          1
             0.000
                     0.000
                             0.000
161
                                     0.000 {numpy.core.multiarray.copyto}
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 {sklearn.svm.libsvm.set_verbosity_wrap}
          2
164
             0.000
                     0.000
                             0.000
                                     0.000 base.py:702(isspmatrix)
          2
165
             0.000
                     0.000
                             0.000
                                     0.000 numeric.py:462(asanyarray)
          3
166
             0.000
                     0.000
                             0.000
                                     0.000 {isinstance}
          6
             0.000
                     0.000
                             0.000
                                     0.000 \{len\}
167
          3
             0.000
                     0.000
                             0.000
                                     0.000 {hasattr}
168
          2
169
             0.000
                     0.000
                             0.000
                                     0.000 {callable}
          1
170
             0.000
                     0.000
                             0.000
                                     0.000 {method 'copy' of 'numpy.ndarray' objects}
             0.000
                     0.000
                             0.000
                                     0.000 validation.py:503(check_random_state)
171
          1
172
          1
             0.000
                     0.000
                             0.000
                                     0.000 base.py:203(_warn_from_fit_status)
173
          1
                             0.000
             0.000
                     0.000
                                     0.000 getlimits.py:269(max)
174
                             0.000
                                     0.000 {method 'index' of 'list' objects}
          1
             0.000
                     0.000
175
          1
             0.000
                     0.000
                             0.000
                                     0.000 {method 'append' of 'list' objects}
```

File - unknown				
176	1	0.000	0.000 0.000 0.000	0.000 {method 'disable' of '_lsprof.Profiler' objects} profile:0(profiler)
177	0	0.000	0.000	profile:0(profiler)
178				
179				
180	_	o		
181	Process	finished	d with exit code	0
182				