```
/usr/bin/python /Users/LT/Documents/Uni/MA/increOCSVM/evaluation 2.py
    segment0: nu=0.5, gamma=0.3
   data size: 2308
 4 break_count: 2288
   train_size: 972.0
    Confusion matrix:
   [[ 214 115]
    [ 953 1026]]
   precision: 0.89921121823, recall: 0.518443658413, f1-score: 0.657692307692
10
11
   Confusion matrix:
12
    Prediction -1
13
    Target
14
            213 116
   -1
           944 1035
15
    1
   precision: 0.899218071242, recall: 0.522991409803, f1-score: 0.661341853035
16
17
18 Confusion matrix:
19
    Prediction -1
20
   Target
21
22
   -1
            213 116
           941 1038
    1
23
    precision: 0.899480069324, recall: 0.524507326933, f1-score: 0.662623683371
24
25
    *** PROFILER RESULTS ***
26
    incremental_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:145
27
    function called 1 times
28
29
         49065 function calls in 11.642 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 11.642 11.642 evaluation_2.py:145(incremental_ocsvm)
36
        1
            7.029
                   7.029
                           7.900
                                   7.900 ocsvm.py:98(increment)
                   0.007
37
            0.007
                           3.742
        1
                                   3.742 ocsvm.py:35(fit)
38
                   0.143
                           3.735
                                   3.735 ocsvm.py:62(alpha)
        1
            0.143
                                   3.523 coneprog.py:4159(qp)
39
            0.005
                   0.005
                           3.523
        1
40
        1
                   0.010
                           3.518
                                   3.518 coneprog.py:1441(coneqp)
            0.010
                                   0.213 coneprog.py:1984(kktsolver)
41
        15
            0.000
                   0.000
                            3.191
42
        15
                            3.191
                                   0.213 misc.py:1389(factor)
            0.105
                    0.007
43
        15
                            1.556
            1.556
                    0.104
                                   0.104 {cvxopt.base.syrk}
44
        15
            1.040
                    0.069
                            1.040
                                   0.069 {cvxopt.base.gemm}
45
            0.454
        30
                   0.015
                           0.454
                                   0.015 {cvxopt.lapack.potrf}
46
       8090
             0.348
                     0.000
                             0.348
                                    0.000 \{ \min \}
47
        2
            0.000
                   0.000
                           0.256
                                  0.128 ocsvm.py:58(gram)
        2
2
48
                           0.256
            0.000
                   0.000
                                   0.128 pairwise.py:1164(pairwise_kernels)
49
            0.000
                           0.256
                                   0.128 pairwise.py:949(_parallel_pairwise)
                   0.000
        2
50
            0.079
                          0.256
                                   0.128 pairwise.py:740(rbf_kernel)
                   0.039
51
       176
            0.227
                    0.001
                           0.227
                                    0.001 {cvxopt.base.gemv}
                           0.198
52
        29
            0.002 0.000
                                   0.007 misc.py:1489(solve)
53
        28
            0.000
                    0.000
                           0.193
                                   0.007 coneprog.py:2333(f4)
                    0.000
54
            0.001
                           0.193
        28
                                   0.007 coneprog.py:2291(f4_no_ir)
55
                                   0.088 pairwise.py:136(euclidean_distances)
        2
                   0.044
                           0.176
            0.089
56
                                    0.000 {method 'dot' of 'numpy.ndarray' objects}
       6331
             0.156 0.000
                             0.156
57
            0.000
                   0.000
                           0.087
        2
                                   0.043 extmath.py:171(safe_sparse_dot)
        2
58
            0.087
                   0.043
                           0.087
                                   0.043 {numpy.core._dotblas.dot}
```

File - unknown

```
0.003 coneprog.py:1900(fG)
             0.000
                    0.000
                            0.084
 59
         30
 60
         30
             0.003
                     0.000
                            0.084
                                    0.003 misc.py:801(sgemy)
         58
             0.050
                     0.001
                            0.050
                                    0.001 {cvxopt.blas.trsv}
 61
        1226
                             0.040
 62
              0.013
                      0.000
                                     0.000 numeric.py:136(ones)
        8047
                      0.000
 63
              0.035
                             0.035
                                     0.000 {numpy.core.multiarray.where}
 64
       2380
              0.034
                     0.000 0.034
                                     0.000 {method 'remove' of 'list' objects}
             0.034 0.002 0.034
                                    0.002 {cvxopt.blas.trsm}
 65
         15
             0.021
 66
        536
                     0.000 0.028
                                    0.000 numeric.py:966(outer)
                    0.000
 67
         2
            0.000
                           0.018
                                   0.009 shape_base.py:179(vstack)
        1226 0.018
 68
                     0.000 0.018
                                     0.000 {numpy.core.multiarray.copyto}
 69
        3152 0.018 0.000 0.018
                                     0.000 {numpy.core.multiarray.empty}
 70
         2
            0.018
                    0.009 0.018 0.009 {numpy.core.multiarray.concatenate}
         15
 71
             0.000
                     0.000
                            0.017
                                    0.001 coneprog.py:1847(fP)
 72
         15
             0.016
                     0.001
                            0.016
                                    0.001 {cvxopt.base.symv}
 73
        1076 0.003 0.000 0.005
                                    0.000 numeric.py:392(asarray)
 74
             0.004
                    0.000
                            0.005
                                    0.000 misc.py:422(update_scaling)
 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 71.044 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 71.044 71.044 evaluation_2.py:141(cvxopt_ocsvm)
 89
                    0.037 71.044 71.044 ocsvm.py:35(fit)
         1
             0.037
                    1.309 71.003 71.003 ocsvm.py:62(alpha)
 90
         1
             1.309
 91
                    0.019 69.063 69.063 coneprog.py:4159(qp)
             0.019
         1
 92
                    0.013 69.044 69.044 coneprog.py:1441(coneqp)
             0.013
         1
 93
                                    5.604 coneprog.py:1984(kktsolver)
         12
             0.000
                    0.000 67.244
 94
                     0.041 67.244
         12
             0.489
                                    5.604 misc.py:1389(factor)
 95
         12
             35.700
                     2.975
                            35.700
                                    2.975 {cvxopt.base.syrk}
 96
            23.635
                     1.970 23.635
         12
                                     1.970 {cvxopt.base.gemm}
 97
             7.183
                     0.299
                            7.183
         24
                                    0.299 {cvxopt.lapack.potrf}
 98
        140
             1.373
                     0.010
                            1.373
                                    0.010 {cvxopt.base.gemv}
 99
         23
             0.002
                     0.000
                            1.172
                                    0.051 misc.py:1489(solve)
         22
100
             0.000
                     0.000
                            1.125
                                    0.051 coneprog.py:2333(f4)
         22
101
             0.001
                     0.000
                            1.124
                                    0.051 coneprog.py:2291(f4_no_ir)
         24
102
             0.001
                     0.000
                            0.491
                                    0.020 coneprog.py:1900(fG)
         24
                            0.490
103
                                    0.020 misc.py:801(sgemv)
             0.001
                     0.000
104
             0.000
                    0.000
                            0.431
                                   0.215 ocsvm.py:58(gram)
         2
105
             0.000
                    0.000
                            0.431
                                   0.215 pairwise.py:1164(pairwise_kernels)
106
             0.000
                    0.000
                            0.431
                                   0.215 pairwise.py:949(_parallel_pairwise)
         2
107
             0.120
                    0.060
                            0.431
                                   0.215 pairwise.py:740(rbf_kernel)
         2
             0.150
108
                    0.075
                            0.309
                                   0.155 pairwise.py:136(euclidean_distances)
         46
             0.286
                    0.006
                            0.286
109
                                    0.006 {cvxopt.blas.trsv}
110
         12
             0.233
                    0.019
                            0.233
                                    0.019 {cvxopt.blas.trsm}
         2
            0.000
                    0.000
                            0.172
                                   0.086 shape_base.py:179(vstack)
111
112
             0.172
                    0.086
                            0.172
                                   0.086 {numpy.core.multiarray.concatenate}
            0.000
                    0.000
113
                            0.158
                                   0.079 extmath.py:171(safe_sparse_dot)
         2
114
             0.158
                    0.079
                            0.158
                                   0.079 {numpy.core._dotblas.dot}
         12
115
                            0.088
             0.000
                     0.000
                                    0.007 coneprog.py:1847(fP)
                            0.088
116
         12
             0.088
                     0.007
                                    0.007 {cvxopt.base.symv}
117
         2
            0.009
                    0.005
                            0.031
                                   0.015 twodim_base.py:221(diag)
```

File - unknown

```
0.005
              0.021
                              0.021
                                      0.005 {numpy.core.multiarray.zeros}
118
          4
                              0.012
119
          11
              0.010
                      0.001
                                      0.001 misc.py:422(update scaling)
120
         91
              0.007
                      0.000
                              0.007
                                      0.000 {cvxopt.blas.copy}
         203
              0.006 0.000
121
                              0.006
                                      0.000 {cvxopt.blas.axpy}
122
              0.000
                     0.000
          1
                              0.004
                                     0.004 ocsvm.py:45(rho)
123
         83
              0.003
                      0.000
                              0.003
                                      0.000 {range}
124
              0.002
                      0.000
                              0.002
                                      0.000 {cvxopt.misc_solvers.scale2}
         66
125
          11
              0.000
                      0.000
                              0.002
                                      0.000 misc.py:945(ssqr)
126
              0.000
                     0.000
                              0.002
          4
                                      0.000 pairwise.py:57(check_pairwise_arrays)
127
         50
              0.002
                      0.000
                              0.002
                                      0.000 {cvxopt.misc_solvers.sdot}
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 0.152 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
                              0.152
                                      0.152 evaluation_2.py:137(sklearn_ocsvm)
          1
141
          1
              0.000
                     0.000
                                      0.152 classes.py:941(fit)
                              0.152
142
          1
              0.000
                     0.000
                              0.152
                                      0.152 base.py:99(fit)
143
          1
              0.000
                     0.000
                              0.152
                                      0.152 base.py:211(_dense_fit)
144
                              0.152
          1
              0.152
                      0.152
                                      0.152 {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 {method 'randint' of 'mtrand.RandomState'
     objects \
151
              0.000
                     0.000
                              0.000
          1
                                      0.000 validation.py:126(_shape_repr)
152
          1
              0.000
                     0.000
                              0.000
                                      0.000 numeric.py:136(ones)
153
          1
              0.000
                     0.000
                              0.000
                                      0.000 {method 'join' of 'str' objects}
          1
                              0.000
154
              0.000
                     0.000
                                      0.000 base.py:193(_validate_targets)
155
          1
              0.000
                     0.000
                              0.000
                                      0.000 shape_base.py:60(atleast_2d)
156
          1
              0.000
                     0.000
                              0.000
                                      0.000 getlimits.py:244(__init__)
157
          5
                     0.000
                              0.000
                                      0.000 {numpy.core.multiarray.array}
              0.000
          1
158
              0.000
                              0.000
                                      0.000 {numpy.core.multiarray.copyto}
                     0.000
159
          2
              0.000
                      0.000
                              0.000
                                      0.000 {numpy.core.multiarray.empty}
          1
160
              0.000
                     0.000
                              0.000
                                      0.000 {method 'copy' of 'numpy.ndarray' objects}
          1
                              0.000
161
              0.000
                     0.000
                                      0.000 validation.py:105(_num_samples)
          2
162
              0.000
                     0.000
                              0.000
                                      0.000 numeric.py:392(asarray)
163
          3
              0.000
                     0.000
                              0.000
                                      0.000 validation.py:153(<genexpr>)
          2
164
              0.000
                     0.000
                              0.000
                                      0.000 numeric.py:462(asanyarray)
          1
165
              0.000
                     0.000
                              0.000
                                      0.000 {sklearn.svm.libsvm.set_verbosity_wrap}
          3
                                      0.000 {hasattr}
166
              0.000
                     0.000
                              0.000
                                      0.000 validation.py:503(check_random_state)
          1
              0.000
                              0.000
167
                     0.000
          2
168
              0.000
                     0.000
                              0.000
                                      0.000 base.py:702(isspmatrix)
          1
169
              0.000
                     0.000
                              0.000
                                      0.000 getlimits.py:269(max)
          3
170
              0.000
                     0.000
                              0.000
                                      0.000 {isinstance}
                     0.000
          1
                              0.000
171
              0.000
                                      0.000 base.py:203(_warn_from_fit_status)
                                      0.000 {method 'append' of 'list' objects}
0.000 {method 'disable' of '_lsprof.Profiler' objects}
172
          1
              0.000
                      0.000
                              0.000
173
          1
              0.000
                      0.000
                              0.000
174
                                      0.000 {method 'index' of 'list' objects}
                              0.000
          1
              0.000
                      0.000
175
          6
             0.000
                     0.000
                              0.000
                                      0.000 \{len\}
```

File - unknown

176 2 0.000 0.000 0.000 0.000 (callable) 177 0 0.000 0.000 profile:0(profiler) 178 179 180 181 Process finished with exit code 0 182	File - unknown					
177 0 0.000 0.000 profile:0(profiler) 178 179 180 181 Process finished with exit code 0 182	176	2	0.000	0.000 0.000	0.000 {callable}	
178 179 180 181 182 Process finished with exit code 0	1177	0	0.000	0.000	profile:0(profiler)	
179 180 181 181 Process finished with exit code 0 182	178				r vr	
180 Process finished with exit code 0 182	179					
181 Process finished with exit code 0 182	180					
182	181	Process	finished	l with evit code (
	182	1100033	THIISHOC	i willi call code c	,	
	102					
	1					
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	1					
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