```
/usr/bin/python /Users/LT/Documents/Uni/MA/increOCSVM/evaluation 2.py
    pima: nu=0.5, gamma=0.1
    data size: 768
 4 break_count: 748
    train_size: 324.0
    Confusion matrix:
    [[117 151]
    [257 243]]
    precision: 0.616751269036, recall: 0.486, f1-score: 0.543624161074
10
11
    Confusion matrix:
12
    Prediction -1 1
13
    Target
14
            114 154
   -1
15
            246 254
    1
   precision: 0.622549019608, recall: 0.508, f1-score: 0.559471365639
16
17
18 Confusion matrix:
19
    Prediction -1
20
    Target
21
22
    -1
            117 151
    1
            258 242
23
    precision: 0.615776081425, recall: 0.484, f1-score: 0.541993281075
24
25
    *** PROFILER RESULTS ***
26
    incremental_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:145
27
    function called 1 times
28
29
         27151 function calls in 2.379 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
                           2.379
                                   2.379 evaluation_2.py:145(incremental_ocsvm)
36
         1
            2.177
                           2.277
                                   2.277 ocsvm.py:98(increment)
                    2.177
37
            0.000
                   0.000 0.101
         1
                                   0.101 ocsvm.py:35(fit)
38
                           0.101
         1
            0.008
                    0.008
                                   0.101 ocsvm.py:62(alpha)
                                   0.087 coneprog.py:4159(qp)
39
            0.000
                    0.000
                           0.087
         1
40
                           0.087
                                   0.087 coneprog.py:1441(coneqp)
         1
            0.002
                    0.002
                                    0.007 coneprog.py:1984(kktsolver)
0.007 misc.py:1389(factor)
41
        10
            0.000
                           0.072
                    0.000
42
                           0.072
        10
            0.004
                   0.000
43
       3640 0.038 0.000 0.038
                                     0.000 \{ \min \}
                            0.034
44
        10
            0.034
                    0.003
                                    0.003 {cvxopt.base.gemm}
45
        10
            0.025
                    0.003
                            0.025
                                    0.003 {cvxopt.base.syrk}
46
       3016 0.022 0.000
                             0.022
                                     0.000 {method 'dot' of 'numpy.ndarray' objects}
47
            0.000 0.000
                           0.013
                                   0.006 ocsvm.py:58(gram)
         2
         2
2
48
            0.000
                    0.000
                           0.013
                                   0.006 pairwise.py:1164(pairwise_kernels)
49
                                   0.006 pairwise.py:949(_parallel_pairwise)
            0.000
                    0.000
                           0.013
         \bar{2}
50
                                   0.006 pairwise.py:740(rbf_kernel)
            0.005
                    0.003
                           0.013
51
        20
            0.008
                    0.000
                           0.008
                                    0.000 {cvxopt.lapack.potrf}
52
        116
            0.007 0.000 0.007
                                    0.000 {cvxopt.base.gemv}
53
         2
            0.003 0.001
                           0.007
                                   0.004 pairwise.py:136(euclidean_distances)
54
       299
             0.005 0.000 0.007
                                    0.000 numeric.py:966(outer)
55
             0.000
                            0.006
        18
                    0.000
                                    0.000 coneprog.py:2333(f4)
56
                            0.006
                                    0.000 coneprog.py:2291(f4_no_ir)
        18
             0.000
                    0.000
57
        19
                            0.006
                                    0.000 misc.py:1489(solve)
             0.000
                    0.000
58
       3514
             0.006 \quad 0.000
                             0.006
                                    0.000 {numpy.core.multiarray.where}
```

File - unknown

```
490
              0.001
                     0.000
                             0.005
                                     0.000 numeric.py:136(ones)
 59
 60
        1064 0.004 0.000
                              0.004
                                     0.000 {method 'remove' of 'list' objects}
 61
             0.000
                    0.000
                            0.004
                                   0.002 extmath.py:171(safe_sparse_dot)
         2
 62
            0.004 0.002
                           0.004
                                   0.002 {numpy.core._dotblas.dot}
                                     0.000 {range}
        4844 0.004
                      0.000
                              0.004
 63
 64
        1406 0.003
                     0.000
                             0.003
                                     0.000 {numpy.core.multiarray.empty}
         20
             0.000
                    0.000
                            0.003
                                    0.000 coneprog.py:1900(fG)
 65
 66
         20
             0.000
                     0.000
                            0.003
                                    0.000 misc.py:801(sgemv)
        490
             0.002
 67
                     0.000
                             0.002
                                     0.000 {numpy.core.multiarray.copyto}
            0.000 0.000
 68
                            0.002
                                    0.001 shape_base.py:179(vstack)
 69
         2
             0.002
                    0.001
                            0.002
                                    0.001 {numpy.core.multiarray.concatenate}
 70
        578
             0.002
                     0.000
                            0.002
                                     0.000 {numpy.core.multiarray.zeros}
                                     0.000 numeric.py:392(asarray)
 71
        602
             0.001
                             0.001
                     0.000
 72
         1
             0.001
                    0.001
                            0.001
                                    0.001 linalg.py:454(inv)
 73
        621
             0.001
                     0.000
                             0.001
                                     0.000 {numpy.core.multiarray.array}
 74
         38
             0.001
                     0.000
                             0.001
                                    0.000 {cvxopt.blas.trsv}
 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
          2194 function calls in 1.417 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
                                    1.417 evaluation_2.py:141(cvxopt_ocsvm)
             0.000 0.000
                            1.417
 89
         1
                                    1.417 ocsvm.py:35(fit)
             0.004
                    0.004
                            1.417
                                    1.408 ocsvm.py:62(alpha)
 90
         1
             0.059
                    0.059
                            1.408
 91
                    0.002
                            1.316
         1
             0.002
                                    1.316 coneprog.py:4159(qp)
 92
                            1.313
             0.003
                    0.003
                                    1.313 coneprog.py:1441(coneqp)
         1
                                    0.111 coneprog.py:1984(kktsolver)
 93
                            1.225
             0.000
                     0.000
         11
 94
             0.028
                             1.225
         11
                     0.003
                                    0.111 misc.py:1389(factor)
 95
             0.601
                     0.055
                             0.601
                                    0.055 {cvxopt.base.syrk}
         11
 96
             0.454
                             0.454
         11
                     0.041
                                    0.041 {cvxopt.base.gemm}
 97
             0.132
         22
                     0.006
                             0.132
                                    0.006 {cvxopt.lapack.potrf}
 98
        128
             0.061
                     0.000
                             0.061
                                     0.000 {cvxopt.base.gemv}
 99
         21
             0.001
                     0.000
                             0.054
                                    0.003 misc.py:1489(solve)
         20
100
             0.000
                     0.000
                             0.052
                                    0.003 coneprog.py:2333(f4)
101
         20
             0.000
                     0.000
                             0.052
                                    0.003 coneprog.py:2291(f4_no_ir)
         2
102
             0.000
                    0.000
                            0.026
                                    0.013 ocsvm.py:58(gram)
         2
             0.000
103
                            0.026
                    0.000
                                    0.013 pairwise.py:1164(pairwise_kernels)
104
             0.000
                    0.000
                            0.026
                                    0.013 pairwise.py:949(_parallel_pairwise)
         2
105
             0.011
                    0.005
                            0.026
                                    0.013 pairwise.py:740(rbf_kernel)
         22
106
             0.000
                     0.000
                            0.021
                                    0.001 coneprog.py:1900(fG)
         22
                                    0.001 misc.py:801(sgemv)
107
             0.000
                     0.000
                             0.021
         2
                            0.015
108
             0.007
                    0.003
                                    0.008 pairwise.py:136(euclidean_distances)
109
         42
             0.012
                     0.000
                             0.012
                                    0.000 {cvxopt.blas.trsv}
110
         11
             0.009
                     0.001
                             0.009
                                    0.001 {cvxopt.blas.trsm}
         2
             0.000
                    0.000
                            0.009
                                    0.004 extmath.py:171(safe_sparse_dot)
111
         2
112
             0.009
                    0.004
                            0.009
                                    0.004 {numpy.core._dotblas.dot}
             0.000
                            0.008
113
                    0.000
                                    0.004 shape_base.py:179(vstack)
         2
114
             0.008
                    0.004
                            0.008
                                    0.004 {numpy.core.multiarray.concatenate}
         1
115
                            0.005
             0.000
                    0.000
                                    0.005 ocsvm.py:45(rho)
                     0.000
                             0.004
116
         11
             0.000
                                    0.000 coneprog.py:1847(fP)
117
         11
             0.004
                     0.000
                             0.004
                                    0.000 {cvxopt.base.symv}
```

File - unknown

```
0.001
             0.002
                             0.003
                                     0.001 twodim base.py:221(diag)
118
         10
                             0.002
119
             0.002
                     0.000
                                     0.000 misc.py:422(update scaling)
120
          4
             0.001
                     0.000
                             0.001
                                     0.000 {numpy.core.multiarray.zeros}
121
         76
              0.001
                     0.000
                              0.001
                                     0.000 {range}
122
                              0.001
                                      0.000 {cvxopt.misc_solvers.scale2}
         60
              0.001
                      0.000
123
         185
              0.001
                     0.000
                             0.001
                                      0.000 {cvxopt.blas.axpy}
124
             0.000 0.000
                             0.000
          4
                                     0.000 pairwise.py:57(check_pairwise_arrays)
             0.000
125
         28
                     0.000
                             0.000
                                     0.000 {numpy.core.multiarray.array}
                             0.000
126
             0.000
                     0.000
                                     0.000 validation.py:268(check_array)
          6
127
          19
              0.000
                     0.000
                             0.000
                                     0.000 numeric.py:462(asanyarray)
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 0.013 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
                             0.013
                                     0.013 evaluation_2.py:137(sklearn_ocsvm)
          1
141
          1
             0.000
                     0.000
                             0.013
                                     0.013 classes.py:941(fit)
142
          1
             0.000
                     0.000
                             0.013
                                     0.013 base.py:99(fit)
143
          1
             0.000
                     0.000
                             0.012
                                     0.012 base.py:211(_dense_fit)
144
                             0.012
          1
             0.012
                     0.012
                                     0.012 {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
             0.000
                     0.000
                             0.000
          1
                                     0.000 validation.py:126(_shape_repr)
151
          1
             0.000
                     0.000
                             0.000
                                     0.000 numeric.py:136(ones)
152
          1
             0.000
                     0.000
                             0.000
                                     0.000 {method 'randint' of 'mtrand.RandomState'
     objects}
153
             0.000
                     0.000
                             0.000
                                     0.000 shape_base.py:60(atleast_2d)
          1
154
             0.000
                             0.000
          1
                     0.000
                                     0.000 base.py:193(_validate_targets)
          5
                             0.000
155
             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}
          2
157
                     0.000
                             0.000
             0.000
                                     0.000 {numpy.core.multiarray.empty}
          2
158
             0.000
                             0.000
                                     0.000 numeric.py:392(asarray)
                     0.000
159
          1
             0.000
                     0.000
                             0.000
                                     0.000 getlimits.py:244(__init__)
          1
160
             0.000
                     0.000
                             0.000
                                     0.000 {numpy.core.multiarray.copyto}
          3
             0.000
                             0.000
161
                     0.000
                                     0.000 validation.py:153(<genexpr>)
162
          1
             0.000
                     0.000
                             0.000
                                     0.000 {method 'copy' of 'numpy.ndarray' objects}
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)
          1
166
             0.000
                     0.000
                             0.000
                                     0.000 validation.py:105(_num_samples)
          6
             0.000
                             0.000
167
                     0.000
                                     0.000 \{len\}
          3
             0.000
                     0.000
                             0.000
                                     0.000 {hasattr}
168
          1
169
             0.000
                     0.000
                             0.000
                                     0.000 base.py:203(_warn_from_fit_status)
170
          1
             0.000
                     0.000
                             0.000
                                     0.000 getlimits.py:269(max)
             0.000
                     0.000
                             0.000
171
          1
                                     0.000 validation.py:503(check_random_state)
          3
172
             0.000
                     0.000
                             0.000
                                     0.000 {isinstance}
173
          1
                             0.000
                                     0.000 {method 'append' of 'list' objects}
             0.000
                     0.000
174
                             0.000
                                     0.000 {method 'index' of 'list' objects}
          1
             0.000
                     0.000
175
          2
             0.000
                     0.000
                             0.000
                                     0.000 {callable}
```

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				