```
/usr/bin/python /Users/LT/Documents/Uni/MA/increOCSVM/evaluation 2.py
    pima: nu=0.9, gamma=30
    data size: 768
   break_count: 748
    train_size: 582.0
    Confusion matrix:
    [[ 28 240]
    [ 54 446]]
    precision: 0.650145772595, recall: 0.892, f1-score: 0.752107925801
10
11
    Confusion matrix:
12
    Prediction -1 1
13
    Target
14
            30 238
   -1
15
    1
            57 443
   precision: 0.650513950073, recall: 0.886, f1-score: 0.750211685013
16
17
18
   Confusion matrix:
19
    Prediction -1
20
    Target
21
22
            30 238
    -1
    1
            54 446
23
    precision: 0.652046783626, recall: 0.892, f1-score: 0.753378378378
24
25
    *** PROFILER RESULTS ***
26
    incremental_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:145
27
    function called 1 times
28
29
         5914 function calls in 0.687 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
                           0.687
                                   0.687 evaluation_2.py:145(incremental_ocsvm)
36
         1
            0.001
                    0.001
                           0.544
                                   0.544 ocsvm.py:35(fit)
                           0.543
                                   0.543 ocsvm.py:62(alpha)
37
            0.022
         1
                    0.022
38
         1
            0.001
                    0.001
                           0.507
                                   0.507 coneprog.py:4159(qp)
                    0.004
                                   0.506 coneprog.py:1441(coneqp)
39
            0.004
                           0.506
         1
40
                                    0.034 coneprog.py:1984(kktsolver)
        13
            0.000
                    0.000
                            0.446
                                    0.034 misc.py:1389(factor)
41
        13
            0.016
                    0.001
                            0.446
42
        13
            0.192
                    0.015
                            0.192
                                    0.015 {cvxopt.base.gemm}
43
        13
            0.184
                            0.184
                    0.014
                                    0.014 {cvxopt.base.syrk}
44
        1
            0.116
                           0.142
                                   0.142 ocsvm.py:98(increment)
                    0.116
45
        26
            0.049
                    0.002
                            0.049
                                    0.002 {cvxopt.lapack.potrf}
46
        152
             0.037
                    0.000
                            0.037
                                    0.000 {cvxopt.base.gemv}
47
        24
             0.000
                    0.000
                            0.035
                                    0.001 coneprog.py:2333(f4)
                                    0.001 misc.py:1489(solve)
48
        25
             0.001
                    0.000
                            0.035
49
        24
            0.000
                    0.000
                           0.035
                                    0.001 coneprog.py:2291(f4_no_ir)
50
        2
2
2
2
            0.000
                    0.000 0.018
                                   0.009 ocsvm.py:58(gram)
51
            0.000
                    0.000
                           0.018
                                   0.009 pairwise.py:1164(pairwise_kernels)
52
            0.000
                    0.000
                           0.018
                                   0.009 pairwise.py:949(_parallel_pairwise)
53
            0.007
                    0.004
                           0.018
                                   0.009 pairwise.py:740(rbf_kernel)
            0.000
54
        26
                                    0.000 coneprog.py:1900(fG)
                    0.000
                           0.012
55
                                    0.000 misc.py:801(sgemv)
        26
            0.000
                            0.012
                    0.000
                                   0.005 pairwise.py:136(euclidean_distances)
56
         2
            0.006
                    0.003
                           0.011
57
        50
            0.009
                    0.000
                            0.009
                                    0.000 {cvxopt.blas.trsv}
58
       412
            0.008
                    0.000
                            0.008
                                    0.000 \{ \min \}
```

File - unknown

```
0.005
                     0.000
                            0.005
                                    0.000 {cvxopt.blas.trsm}
 59
         13
 60
         2
             0.000
                    0.000
                            0.004
                                    0.002 extmath.py:171(safe sparse dot)
         2
                            0.004
 61
             0.004
                    0.002
                                    0.002 {numpy.core._dotblas.dot}
             0.000
         2
                    0.000
                            0.004
 62
                                    0.002 shape_base.py:179(vstack)
                     0.000
 63
        326
             0.004
                             0.004
                                     0.000 {method 'dot' of 'numpy.ndarray' objects}
 64
         2
             0.004 0.002
                            0.004
                                    0.002 {numpy.core.multiarray.concatenate}
 65
         12
             0.002
                     0.000
                             0.002
                                    0.000 misc.py:422(update_scaling)
 66
         13
             0.000
                     0.000
                             0.002
                                     0.000 coneprog.py:1847(fP)
                             0.002
 67
         13
             0.002
                     0.000
                                    0.000 {cvxopt.base.symv}
 68
         2
             0.001
                    0.001
                            0.001
                                    0.001 twodim_base.py:221(diag)
 69
        221
             0.001
                     0.000
                             0.001
                                     0.000 {cvxopt.blas.axpy}
 70
         33
             0.001
                     0.000
                             0.001
                                     0.000 numeric.py:966(outer)
        375
 71
             0.001
                     0.000
                             0.001
                                     0.000 {numpy.core.multiarray.where}
                                     0.000 numeric.py:136(ones)
 72
         46
             0.000
                     0.000
                             0.001
 73
        293
             0.001
                      0.000
                             0.001
                                     0.000 {range}
 74
         1
             0.001
                    0.001
                            0.001
                                    0.001 misc.py:20(<module>)
 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
          2698 function calls in 3.281 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
                                    3.281 evaluation_2.py:141(cvxopt_ocsvm)
                    0.000
                            3.281
             0.000
 89
         1
             0.006
                    0.006
                             3.281
                                    3.281 ocsvm.py:35(fit)
 90
         1
             0.093
                    0.093
                             3.273
                                    3.273 ocsvm.py:62(alpha)
 91
                    0.004
                            3.125
         1
             0.004
                                    3.125 coneprog.py:4159(qp)
 92
                             3.121
             0.005
                    0.005
                                    3.121 coneprog.py:1441(coneqp)
         1
 93
                             2.944
                                    0.210 coneprog.py:1984(kktsolver)
             0.000
                     0.000
         14
 94
                             2.944
         14
             0.055
                     0.004
                                    0.210 misc.py:1389(factor)
 95
         14
             1.562
                     0.112
                             1.562
                                     0.112 {cvxopt.base.syrk}
 96
             1.000
                             1.000
         14
                     0.071
                                     0.071 {cvxopt.base.gemm}
 97
         28
             0.307
                     0.011
                             0.307
                                     0.011 {cvxopt.lapack.potrf}
 98
         164
             0.126
                     0.001
                             0.126
                                     0.001 {cvxopt.base.gemv}
 99
         27
             0.001
                     0.000
                             0.109
                                     0.004 misc.py:1489(solve)
100
         26
             0.000
                     0.000
                             0.106
                                     0.004 coneprog.py:2333(f4)
101
         26
             0.000
                     0.000
                             0.106
                                     0.004 coneprog.py:2291(f4_no_ir)
         28
102
             0.000
                     0.000
                             0.045
                                     0.002 coneprog.py:1900(fG)
         28
103
                             0.045
                                    0.002 misc.py:801(sgemv)
             0.001
                     0.000
104
             0.000
                     0.000
                            0.040
                                    0.020 ocsvm.py:58(gram)
         2
105
             0.000
                    0.000
                            0.040
                                    0.020 pairwise.py:1164(pairwise_kernels)
         2
106
             0.000
                    0.000
                            0.040
                                    0.020 pairwise.py:949(_parallel_pairwise)
         2
107
             0.015
                    0.007
                            0.040
                                    0.020 pairwise.py:740(rbf_kernel)
         54
                             0.026
108
             0.026
                     0.000
                                    0.000 {cvxopt.blas.trsv}
109
         2
                            0.025
             0.011
                    0.005
                                    0.012 pairwise.py:136(euclidean_distances)
110
         14
             0.019
                     0.001
                             0.019
                                    0.001 {cvxopt.blas.trsm}
         2
             0.000
                    0.000
                            0.014
111
                                    0.007 extmath.py:171(safe_sparse_dot)
         2
112
             0.014
                    0.007
                            0.014
                                    0.007 {numpy.core._dotblas.dot}
             0.000
                    0.000
                            0.013
113
                                    0.006 shape_base.py:179(vstack)
         2
114
             0.012
                     0.006
                            0.012
                                    0.006 {numpy.core.multiarray.concatenate}
115
         14
             0.000
                             0.008
                     0.000
                                     0.001 coneprog.py:1847(fP)
                             0.007
116
         14
             0.007
                     0.001
                                     0.001 {cvxopt.base.symv}
117
         13
             0.003
                     0.000
                             0.004
                                     0.000 misc.py:422(update_scaling)
```

File - unknown

```
0.002
                     0.001
                             0.004
118
          2
                                     0.002 twodim_base.py:221(diag)
119
          4
             0.002
                     0.000
                             0.002
                                     0.000 {numpy.core.multiarray.zeros}
120
          1
             0.000
                     0.000
                             0.001
                                     0.001 ocsvm.py:45(rho)
121
         78
              0.001
                      0.000
                              0.001
                                      0.000 {cvxopt.misc_solvers.scale2}
         97
122
                              0.001
                                      0.000 {range}
              0.001
                      0.000
         239
                                      0.000 {cvxopt.blas.axpy}
123
              0.001
                      0.000
                              0.001
124
              0.001
                      0.000
                              0.001
         107
                                      0.000 {cvxopt.blas.copy}
125
         28
              0.000
                      0.000
                             0.000
                                      0.000 {cvxopt.base.sqrt}
         28
126
              0.000
                      0.000
                              0.000
                                      0.000 coneprog.py:1919(fA)
127
         28
              0.000
                      0.000
                              0.000
                                      0.000 {numpy.core.multiarray.array}
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 0.014 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
                             0.014
                                     0.014 evaluation_2.py:137(sklearn_ocsvm)
          1
          1
             0.000
                     0.000
                             0.014
                                     0.014 classes.py:941(fit)
141
142
          1
             0.000
                     0.000
                             0.014
                                     0.014 base.py:99(fit)
143
          1
             0.000
                     0.000
                             0.014
                                     0.014 base.py:211(_dense_fit)
144
                             0.014
          1
             0.014
                     0.014
                                     0.014 {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 {method 'randint' of 'mtrand.RandomState'
                     0.000
     objects}
152
          1
             0.000
                     0.000
                             0.000
                                     0.000 numeric.py:136(ones)
153
          1
             0.000
                     0.000
                             0.000
                                     0.000 shape_base.py:60(atleast_2d)
          1
                             0.000
154
             0.000
                     0.000
                                     0.000 base.py:193(_validate_targets)
          5
155
             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
          1
                     0.000
                             0.000
                                     0.000 getlimits.py:244(__init__)
             0.000
          2
                                     0.000 numeric.py:392(asarray)
158
             0.000
                             0.000
                     0.000
159
          1
             0.000
                     0.000
                             0.000
                                     0.000 {numpy.core.multiarray.copyto}
          2
160
             0.000
                     0.000
                             0.000
                                     0.000 {numpy.core.multiarray.empty}
          1
             0.000
                             0.000
161
                     0.000
                                     0.000 {method 'copy' of 'numpy.ndarray' objects}
          2
162
             0.000
                     0.000
                             0.000
                                     0.000 numeric.py:462(asanyarray)
163
          1
             0.000
                     0.000
                             0.000
                                     0.000 validation.py:105(_num_samples)
164
          3
             0.000
                     0.000
                             0.000
                                     0.000 validation.py:153(<genexpr>)
165
          1
             0.000
                     0.000
                             0.000
                                     0.000 {sklearn.svm.libsvm.set_verbosity_wrap}
          2
166
             0.000
                     0.000
                             0.000
                                     0.000 base.py:702(isspmatrix)
          6
             0.000
                             0.000
167
                     0.000
                                     0.000 \{len\}
          3
             0.000
                     0.000
                             0.000
                                     0.000 {hasattr}
168
          3
169
             0.000
                     0.000
                             0.000
                                     0.000 {isinstance}
          1
170
             0.000
                     0.000
                             0.000
                                     0.000 base.py:203(_warn_from_fit_status)
             0.000
                             0.000
171
          1
                     0.000
                                     0.000 validation.py:503(check_random_state)
          2
172
             0.000
                     0.000
                             0.000
                                     0.000 {callable}
          1
173
                             0.000
                                     0.000 getlimits.py:269(max)
             0.000
                     0.000
174
                             0.000
                                     0.000 {method 'append' of 'list' objects}
          1
             0.000
                     0.000
175
          1
             0.000
                     0.000
                             0.000
                                     0.000 {method 'index' of 'list' objects}
```

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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				