```
/usr/bin/python /Users/LT/Documents/Uni/MA/increOCSVM/evaluation 2.py
 2 haberman: nu=0.5, gamma=1
 3 data size: 306
 4 break_count: 286
   train_size: 129.0
   singular matrix
    Confusion matrix:
   [[ 36 45]
    [ 97 128]]
   precision: 0.739884393064, recall: 0.568888888889, f1-score: 0.643216080402
11
12
   Confusion matrix:
13
    Prediction -1 1
14
   Target
15
            40 41
   -1
16
    1
           119 106
17
   precision: 0.721088435374, recall: 0.471111111111, f1-score: 0.569892473118
18
19
   Confusion matrix:
20 Prediction -1
21
22
   Target
            40 41
   -1
23
    1
           116 109
24
   precision: 0.726666666667, recall: 0.48444444444, f1-score: 0.581333333333
25
26
    *** PROFILER RESULTS ***
27
    incremental_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:145
28
29
    function called 1 times
30
         18160 function calls in 1.521 seconds
31
32
     Ordered by: cumulative time, internal time, call count
33
     List reduced from 136 to 40 due to restriction <40>
34
35
     ncalls tottime percall cumtime percall filename:lineno(function)
36
           0.000 0.000
                                  1.521 evaluation_2.py:145(incremental_ocsvm)
                          1.521
        1
37
                                  1.503 ocsvm.py:98(increment)
        1
            1.463
                   1.463
                          1.503
38
        1
           0.000
                  0.000 0.018
                                  0.018 ocsvm.py:35(fit)
39
                          0.018
                                  0.018 ocsvm.py:62(alpha)
        1
            0.001
                   0.001
40
                   0.000
                         0.016
                                  0.016 coneprog.py:4159(qp)
        1
            0.000
41
        1
            0.002
                   0.002
                          0.016
                                  0.016 coneprog.py:1441(coneqp)
42
       2098
             0.010 0.000 0.010
                                    0.000 \{ \min \}
43
             0.010 0.000 0.010
                                    0.000 {method 'dot' of 'numpy.ndarray' objects}
       1780
44
        8
           0.000 0.000 0.007
                                  0.001 coneprog.py:1984(kktsolver)
45
        8
           0.001
                   0.000 0.007
                                  0.001 misc.py:1389(factor)
            0.004 0.004 0.004 misc.py:20(<module>)
46
        1
47
                                   0.000 numeric.py:966(outer)
       184
            0.003 0.000 0.004
             0.004 0.000 0.004 0.000 {range}
48
       4445
49
       2070 0.003 0.000 0.003
                                    0.000 {numpy.core.multiarray.where}
50
            0.003 0.000 0.003
                                  0.000 {cvxopt.lapack.potrf}
        16
51
       320
            0.001 0.000 0.003
                                   0.000 numeric.py:136(ones)
           0.002 0.000 0.002
52
                                  0.000 {cvxopt.base.syrk}
        8
        2
53
                   0.000 0.002
           0.000
                                  0.001 ocsvm.py:58(gram)
                         0.002
                                  0.001 pairwise.py:1164(pairwise_kernels)
54
           0.000
                   0.000
        2
2
55
                          0.002
                                  0.001 pairwise.py:949(_parallel_pairwise)
            0.000
                   0.000
56
                                  0.001 pairwise.py:740(rbf_kernel)
            0.001
                   0.000
                          0.002
57
            0.002 0.000 0.002 0.000 {numpy.core.multiarray.empty}
       878
58
           0.002 0.001
                          0.002 0.001 linalg.py:454(inv)
```

File - unknown

```
0.000
              0.001
                             0.001
                                     0.000 {method 'remove' of 'list' objects}
 59
        687
                      0.000
 60
        320
              0.001
                              0.001
                                     0.000 {numpy.core.multiarray.copyto}
 61
         2
             0.001
                     0.000
                            0.001
                                    0.001 pairwise.py:136(euclidean_distances)
         14
 62
             0.000
                     0.000
                             0.001
                                     0.000 coneprog.py:2333(f4)
                     0.000
 63
        380
             0.001
                             0.001
                                     0.000 {numpy.core.multiarray.zeros}
 64
         14
             0.000
                     0.000
                             0.001
                                     0.000 coneprog.py:2291(f4_no_ir)
 65
             0.000
                     0.000
                             0.001
                                     0.000 misc.py:1489(solve)
         15
 66
         92
             0.001
                     0.000
                             0.001
                                     0.000 {cvxopt.base.gemv}
 67
         8
             0.001
                     0.000
                            0.001
                                    0.000 {cvxopt.base.gemm}
        374
              0.000
 68
                     0.000
                             0.001
                                     0.000 numeric.py:392(asarray)
 69
        393
              0.001
                      0.000
                             0.001
                                     0.000 {numpy.core.multiarray.array}
                                    0.000 extmath.py:171(safe_sparse_dot)
 70
         2
             0.000
                     0.000
                            0.000
         2
 71
             0.000
                     0.000
                            0.000
                                    0.000 {numpy.core._dotblas.dot}
 72
         16
             0.000
                     0.000
                             0.000
                                     0.000 coneprog.py:1900(fG)
 73
         16
             0.000
                     0.000
                             0.000
                                     0.000 misc.py:801(sgemv)
 74
         49
             0.000
                     0.000
                             0.000
                                     0.000 {cvxopt.blas.dot}
 75
             0.000
                     0.000
                            0.000
                                    0.000 misc.py:422(update_scaling)
 76
 77
 78
 79
     *** PROFILER RESULTS ***
 80
     cvxopt_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:141)
 81
     function called 1 times
 82
 83
          2194 function calls in 0.143 seconds
 84
 85
       Ordered by: cumulative time, internal time, call count
 86
       List reduced from 117 to 40 due to restriction <40>
 87
 88
       ncalls tottime percall cumtime percall filename:lineno(function)
 89
             0.000
                     0.000
                            0.143
                                    0.143 evaluation_2.py:141(cvxopt_ocsvm)
 90
         1
             0.001
                     0.001
                            0.143
                                    0.143 ocsvm.py:35(fit)
 91
                     0.005
                            0.141
         1
             0.005
                                    0.141 ocsvm.py:62(alpha)
 92
                            0.130
             0.000
                     0.000
                                    0.130 coneprog.py:4159(qp)
         1
 93
                     0.002
                            0.130
         1
             0.002
                                    0.130 coneprog.py:1441(coneqp)
 94
         11
             0.000
                     0.000
                             0.111
                                     0.010 coneprog.py:1984(kktsolver)
 95
             0.005
                     0.000
                             0.111
                                     0.010 misc.py:1389(factor)
         11
 96
                             0.052
         11
              0.052
                     0.005
                                     0.005 {cvxopt.base.gemm}
 97
              0.041
                     0.004
                             0.041
         11
                                     0.004 {cvxopt.base.syrk}
 98
         22
              0.012
                     0.001
                             0.012
                                     0.001 {cvxopt.lapack.potrf}
 99
         128
              0.010
                             0.010
                     0.000
                                     0.000 {cvxopt.base.gemv}
100
         20
              0.000
                     0.000
                             0.010
                                     0.000 coneprog.py:2333(f4)
         21
101
              0.000
                     0.000
                             0.009
                                     0.000 misc.py:1489(solve)
         20
                             0.009
102
             0.000
                     0.000
                                     0.000 coneprog.py:2291(f4_no_ir)
         2
                            0.004
103
             0.000
                                    0.002 ocsvm.py:58(gram)
                     0.000
         2
104
             0.000
                     0.000
                            0.004
                                    0.002 pairwise.py:1164(pairwise_kernels)
         2
105
             0.000
                     0.000
                            0.004
                                    0.002 pairwise.py:949(_parallel_pairwise)
         2
106
             0.001
                     0.001
                            0.004
                                    0.002 pairwise.py:740(rbf_kernel)
         22
107
             0.000
                     0.000
                             0.004
                                     0.000 coneprog.py:1900(fG)
         22
                             0.004
108
             0.000
                     0.000
                                     0.000 misc.py:801(sgemv)
109
         2
                     0.000
                            0.002
             0.001
                                    0.001 pairwise.py:136(euclidean_distances)
110
         42
             0.002
                     0.000
                             0.002
                                    0.000 {cvxopt.blas.trsv}
         2
             0.000
                     0.000
                            0.001
                                    0.001 shape_base.py:179(vstack)
111
         2
112
             0.001
                     0.001
                             0.001
                                    0.001 {numpy.core.multiarray.concatenate}
         10
             0.001
                     0.000
113
                             0.001
                                     0.000 misc.py:422(update_scaling)
         2 2
114
             0.000
                     0.000
                            0.001
                                    0.001 extmath.py:171(safe_sparse_dot)
115
                             0.001
             0.001
                     0.001
                                    0.001 {numpy.core._dotblas.dot}
         11
                     0.000
                             0.001
116
              0.001
                                     0.000 {cvxopt.blas.trsm}
117
         11
              0.000
                     0.000
                             0.001
                                     0.000 coneprog.py:1847(fP)
```

File - unknown

```
0.000
                     0.000
                              0.001
                                      0.001 ocsvm.py:45(rho)
118
          1
119
          11
              0.001
                      0.000
                              0.001
                                      0.000 {cvxopt.base.symv}
120
              0.000
                     0.000
                              0.001
                                      0.000 pairwise.py:57(check_pairwise_arrays)
121
          2
              0.000
                     0.000
                              0.001
                                      0.000 twodim_base.py:221(diag)
122
                              0.000
                                      0.000 validation.py:268(check_array)
          6
              0.000
                     0.000
123
         185
              0.000
                     0.000
                              0.000
                                      0.000 {cvxopt.blas.axpy}
124
              0.000
                      0.000
                              0.000
         28
                                      0.000 {numpy.core.multiarray.array}
125
         76
              0.000
                      0.000
                              0.000
                                      0.000 {range}
                              0.000
126
          19
              0.000
                      0.000
                                      0.000 numeric.py:462(asanyarray)
127
         60
              0.000
                      0.000
                              0.000
                                      0.000 {cvxopt.misc_solvers.scale2}
128
          10
              0.000
                      0.000
                              0.000
                                      0.000 shape_base.py:60(atleast_2d)
129
130
131
132
     *** PROFILER RESULTS ***
133
     sklearn_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:137)
134
     function called 1 times
135
136
           57 function calls in 0.003 seconds
137
138
       Ordered by: cumulative time, internal time, call count
139
140
       ncalls tottime percall cumtime percall filename:lineno(function)
141
          1
              0.000
                     0.000
                              0.003
                                      0.003 evaluation_2.py:137(sklearn_ocsvm)
142
          1
              0.000
                     0.000
                              0.003
                                      0.003 classes.py:941(fit)
143
          1
              0.000
                     0.000
                              0.003
                                      0.003 base.py:99(fit)
144
                                      0.003 base.py:211(_dense_fit)
          1
              0.000
                     0.000
                              0.003
145
          1
              0.002
                     0.002
                              0.002
                                      0.002 {sklearn.svm.libsvm.fit}
146
          1
              0.001
                              0.001
                      0.001
                                      0.001 {sklearn.svm.libsvm.set_verbosity_wrap}
147
          1
                              0.000
              0.000
                     0.000
                                      0.000 validation.py:268(check_array)
148
          1
              0.000
                     0.000
                              0.000
                                      0.000 numeric.py:136(ones)
149
          1
              0.000
                     0.000
                              0.000
                                      0.000 validation.py:43(_assert_all_finite)
150
              0.000
                     0.000
                              0.000
          1
                                      0.000 {numpy.core.multiarray.copyto}
151
          1
              0.000
                      0.000
                              0.000
                                      0.000 validation.py:126(_shape_repr)
152
          1
              0.000
                              0.000
                     0.000
                                      0.000 {method 'sum' of 'numpy.ndarray' objects}
              0.000
153
          1
                      0.000
                              0.000
                                      0.000 _methods.py:23(_sum)
154
          1
              0.000
                     0.000
                              0.000
                                      0.000 {method 'randint' of 'mtrand.RandomState'
     objects}
155
              0.000
                     0.000
                              0.000
          2
                                      0.000 {numpy.core.multiarray.empty}
156
              0.000
                     0.000
                              0.000
          1
                                      0.000 {method 'reduce' of 'numpy.ufunc' objects}
157
                     0.000
                              0.000
          1
              0.000
                                      0.000 shape_base.py:60(atleast_2d)
                                      0.000 base.py:193(_validate_targets)
0.000 {method 'join' of 'str' objects}
158
          1
                              0.000
              0.000
                     0.000
159
          1
              0.000
                      0.000
                              0.000
          5
160
              0.000
                      0.000
                              0.000
                                      0.000 {numpy.core.multiarray.array}
          1
                              0.000
                                      0.000 getlimits.py:244(__init_
161
              0.000
                      0.000
          2
162
              0.000
                      0.000
                              0.000
                                      0.000 numeric.py:392(asarray)
          3
163
              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 validation.py:105(_num_samples)
          2
166
              0.000
                     0.000
                              0.000
                                      0.000 base.py:702(isspmatrix)
          1
              0.000
                              0.000
167
                     0.000
                                      0.000 {method 'copy' of 'numpy.ndarray' objects}
168
          1
              0.000
                     0.000
                              0.000
                                      0.000 getlimits.py:269(max)
          1
169
              0.000
                     0.000
                              0.000
                                      0.000 validation.py:503(check_random_state)
          3
170
              0.000
                     0.000
                              0.000
                                      0.000 {hasattr}
              0.000
                     0.000
                              0.000
                                      0.000 {callable}
171
          1
                                      0.000 base.py:203(_warn_from_fit_status)
172
              0.000
                      0.000
                              0.000
173
          1
                                      0.000 {method 'disable' of '_lsprof.Profiler' objects}
              0.000
                      0.000
                              0.000
174
                              0.000
          1
              0.000
                      0.000
                                      0.000 {method 'index' of 'list' objects}
175
          6
             0.000
                     0.000
                              0.000
                                      0.000 \{len\}
```

File - unknown				
176	3	0.000	0.000 0.000 0.000 0.000	0.000 {isinstance}
177	1	0.000	0.000 0.000	0.000 {isinstance} 0.000 {method 'append' of 'list' objects} profile:0(profiler)
178	0	0.000	0.000	profile:0(profiler)
179				
180 181				
182	Process	finished	d with exit code	0
183	110000			