```
/usr/bin/python /Users/LT/Documents/Uni/MA/increOCSVM/evaluation.py
    ecoli1
    increment evaluation
              error f1-score precision recall
    incremental 0.434524 0.416836 0.301037 0.677922
 6
              0.494643 0.404127 0.279092 0.732468
    batch
 8
    *** PROFILER RESULTS ***
 9
    increment (/Users/LT/Documents/Uni/MA/increOCSVM/ocsvm.py:109)
10
    function called 445 times
11
12
         314343 function calls in 6.432 seconds
13
14
      Ordered by: cumulative time, internal time, call count
15
      List reduced from 76 to 40 due to restriction <40>
16
17
      ncalls tottime percall cumtime percall filename:lineno(function)
18
        445
              5.256
                     0.012
                             6.432
                                     0.014 ocsvm.py:109(increment)
19
       1800
                      0.000
                             0.545
              0.008
                                     0.000 ocsvm.py:74(gram)
20
       1800
              0.010
                      0.000
                              0.537
                                      0.000 pairwise.py:1164(pairwise_kernels)
21
22
       1800
              0.004
                      0.000
                              0.527
                                      0.000 pairwise.py:949(_parallel_pairwise)
       1800
              0.026
                      0.000
                             0.523
                                      0.000 pairwise.py:740(rbf_kernel)
23
                      0.000
       3600
              0.014
                              0.352
                                      0.000 pairwise.py:57(check_pairwise_arrays)
24
       4480
              0.042
                      0.000
                              0.307
                                      0.000 validation.py:268(check_array)
25
       1800
              0.087
                      0.000
                              0.281
                                      0.000 pairwise.py:136(euclidean_distances)
26
       11617
              0.161
                      0.000
                              0.161
                                      0.000 {method 'reduce' of 'numpy.ufunc' objects}
27
      20944
              0.148
                              0.148
                                      0.000 {numpy.core.multiarray.array}
                      0.000
28
       4480
              0.041
                      0.000
                              0.124
                                      0.000 validation.py:43(_assert_all_finite)
29
       4814
              0.009
                      0.000
                              0.118
                                      0.000 numeric.py:392(asarray)
30
       9590
                              0.089
              0.021
                      0.000
                                      0.000 numeric.py:136(ones)
31
       4447
              0.009
                      0.000
                              0.084
                                      0.000 {method 'min' of 'numpy.ndarray' objects}
32
       1654
              0.081
                      0.000
                              0.081
                                      0.000 {method 'remove' of 'list' objects}
33
       4480
                      0.000
                                      0.000 {method 'sum' of 'numpy.ndarray' objects}
              0.006
                              0.076
                                     0.000 _methods.py:19(_amin) 0.000 _methods.py:23(_sum)
34
       4447
                      0.000
                              0.075
              0.012
35
       4480
              0.008
                              0.070
                      0.000
36
       4480
              0.017
                      0.000
                              0.069
                                      0.000 validation.py:126(_shape_repr)
37
       4480
                      0.000
                              0.051
                                      0.000 {method 'join' of 'str' objects}
              0.022
38
                              0.049
                                      0.000 fromnumeric.py:1762(any)
       1800
              0.006
                      0.000
39
                              0.048
       5131
              0.048
                      0.000
                                      0.000 {method 'dot' of 'numpy.ndarray' objects}
40
       11650
              0.014
                      0.000
                              0.048
                                      0.000 numeric.py:462(asanyarray)
41
       9590
              0.042
                      0.000
                              0.042
                                      0.000 {numpy.core.multiarray.copyto}
42
        445
             0.017
                             0.037
                     0.000
                                     0.000 linalg.py:454(inv)
43
       6941
              0.037
                      0.000
                              0.037
                                      0.000 {numpy.core.multiarray.zeros}
44
       4480
              0.020
                      0.000
                              0.037
                                      0.000 shape_base.py:60(atleast_2d)
45
       2240
                              0.036
                      0.000
              0.005
                                      0.000 extmath.py:57(row_norms)
46
       3600
              0.019
                      0.000
                              0.031
                                      0.000 pairwise.py:33(_return_float_dtype)
47
       13440
              0.028
                      0.000
                              0.028
                                      0.000 validation.py:153(<genexpr>)
       2240
48
              0.028
                      0.000
                              0.028
                                      0.000 {numpy.core.multiarray.einsum}
49
       1800
                      0.000
                              0.027
                                      0.000 {method 'any' of 'numpy.ndarray' objects}
              0.003
50
       9590
              0.026
                     0.000
                             0.026
                                     0.000 {numpy.core.multiarray.empty}
        445
51
             0.003
                     0.000
                             0.025
                                     0.000 fromnumeric.py:1842(all)
52
       4480
             0.012
                     0.000
                             0.025
                                     0.000 validation.py:105(_num_samples)
53
        445
             0.002
                     0.000
                             0.025
                                     0.000 fromnumeric.py:2632(mean)
54
       1800
              0.003
                      0.000
                             0.024
                                     0.000 _methods.py:31(_any)
                             0.023
55
       445
             0.009
                     0.000
                                     0.000 _methods.py:49(_mean)
56
                              0.023
       1800
              0.004
                      0.000
                                      0.000 extmath.py:171(safe_sparse_dot)
57
       17520
              0.011
                      0.000
                              0.022
                                      0.000 base.py:702(isspmatrix)
58
59
```

```
60
     *** PROFILER RESULTS ***
 61
     train (/Users/LT/Documents/Uni/MA/increOCSVM/ocsvm.py:35)
 62
     function called 10 times
 63
 64
 65
          27979 function calls in 0.682 seconds
 66
 67
       Ordered by: cumulative time, internal time, call count
 68
       List reduced from 117 to 40 due to restriction <40>
 69
 70
       ncalls tottime percall cumtime percall filename:lineno(function)
 71
                     0.000
                             0.682
         10
              0.003
                                     0.068 ocsvm.py:35(train)
 72
         10
                             0.672
              0.025
                     0.002
                                     0.067 ocsvm.py:78(alpha)
 73
         10
              0.001
                     0.000
                             0.620
                                     0.062 coneprog.py:4159(qp)
 74
         10
              0.025
                     0.002
                             0.620
                                     0.062 coneprog.py:1441(coneqp)
 75
                      0.000
                             0.446
         146
              0.001
                                     0.003 coneprog.py:1984(kktsolver)
 76
                      0.000
        146
              0.035
                              0.446
                                     0.003 misc.py:1389(factor)
 77
        146
              0.188
                      0.001
                              0.188
                                     0.001 {cvxopt.base.syrk}
 78
        146
              0.125
                      0.001
                              0.125
                                     0.001 {cvxopt.base.gemm}
 79
        292
              0.087
                      0.000
                              0.087
                                     0.000 {cvxopt.lapack.potrf}
 80
        1712
              0.076
                      0.000
                              0.076
                                     0.000 {cvxopt.base.gemv}
 81
        272
              0.001
                      0.000
                              0.071
                                     0.000 coneprog.py:2333(f4)
        272
 82
              0.002
                      0.000
                              0.069
                                     0.000 coneprog.py:2291(f4_no_ir)
 83
        282
                                     0.000 misc.py:1489(solve)
              0.005
                      0.000
                              0.066
 84
        292
              0.001
                      0.000
                              0.032
                                     0.000 coneprog.py:1900(fG)
        292
 85
              0.003
                      0.000
                             0.031
                                     0.000 misc.py:801(sgemv)
         20
                             0.018
 86
              0.000
                     0.000
                                     0.001 ocsvm.py:74(gram)
 87
         20
              0.000
                     0.000
                             0.018
                                     0.001 pairwise.py:1164(pairwise_kernels)
 88
         20
                     0.000
              0.000
                             0.018
                                     0.001 pairwise.py:949(_parallel_pairwise)
 89
         20
              0.006
                     0.000
                             0.018
                                     0.001 pairwise.py:740(rbf_kernel)
 90
                                     0.000 misc.py:422(update_scaling)
         136
              0.010
                      0.000
                             0.013
 91
        564
              0.011
                      0.000
                             0.011
                                     0.000 {cvxopt.blas.trsv}
 92
         20
                     0.000
                             0.009
              0.003
                                     0.000 pairwise.py:136(euclidean_distances)
 93
         20
                             0.008
              0.000
                     0.000
                                     0.000 shape_base.py:179(vstack)
 94
              0.007
                      0.000
         146
                             0.007
                                     0.000 {cvxopt.blas.trsm}
 95
         146
              0.001
                      0.000
                             0.007
                                     0.000 coneprog.py:1847(fP)
 96
              0.000
                     0.000
                             0.007
                                     0.001 ocsvm.py:46(rho)
         10
              0.007
                      0.000
 97
         146
                             0.007
                                     0.000 {cvxopt.base.symv}
                     0.000
 98
         20
              0.005
                             0.005
                                     0.000 {numpy.core.multiarray.concatenate}
 99
         40
              0.000
                     0.000
                             0.004
                                     0.000 pairwise.py:57(check_pairwise_arrays)
100
        2498
               0.004 0.000
                              0.004
                                      0.000 {cvxopt.blas.axpy}
              0.000
                     0.000
                             0.004
101
         60
                                     0.000 validation.py:268(check_array)
                                     0.000 twodim_base.py:221(diag)
102
         20
              0.003
                     0.000
                             0.004
                             0.004
103
         20
              0.000
                     0.000
                                     0.000 extmath.py:171(safe_sparse_dot)
104
         20
                     0.000
                             0.003
              0.003
                                     0.000 {numpy.core._dotblas.dot}
105
        280
              0.002
                      0.000
                              0.003
                                     0.000 {numpy.core.multiarray.array}
106
        1012
              0.003
                      0.000
                              0.003
                                      0.000 {range}
107
        100
              0.001
                      0.000
                              0.003
                                     0.000 shape_base.py:60(atleast_2d)
108
        190
              0.000
                      0.000
                              0.003
                                     0.000 numeric.py:462(asanyarray)
                                     0.000 {cvxopt.misc_solvers.scale2}
109
        816
              0.003
                      0.000
                              0.003
110
        826
              0.003
                      0.000
                              0.003
                                     0.000 {cvxopt.misc_solvers.scale}
111
112
113
114
     Process finished with exit code 0
115
```