```
1   /usr/bin/python /Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py
2   segment0: nu=0.9, gamma=10
3   data size: 2308
4   break_count: 2288
5   train_size: 1749.0
6   Confusion matrix:
7   [[  52  277]
8    [ 179 1800]]
9   precision: 0.86663456909, recall: 0.909550277918, f1-score: 0.887573964497
10  --------
11  Confusion matrix:
12  Prediction   -1    1
13  Target
14  -1        52  277
15  1        175 1804
16  precision: 0.866890917828, recall: 0.911571500758, f1-score: 0.888669950739
17  ---------
18  Confusion matrix:
19  Prediction   -1    1
20  Target
21  -1        51  278
22  1        177 1802
23  precision: 0.866346153846, recall: 0.910560889338, f1-score: 0.887903424489
24
25  *** PROFILER RESULTS ***
26  incremental_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:145
    )
27  function called 1 times
28
29       12982 function calls in 13.968 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   13.968   13.968 evaluation_2.py:145(incremental_ocsvm)
36        1    0.023    0.023   11.740   11.740 ocsvm.py:35(fit)
37        1    0.255    0.255   11.717   11.717 ocsvm.py:62(alpha)
38        1    0.014    0.014   11.339   11.339 coneprog.py:4159(qp)
39        1    0.011    0.011   11.325   11.325 coneprog.py:1441(coneqp)
40       17    0.000    0.000   10.845    0.638 coneprog.py:1984(kktsolver)
41       17    0.129    0.008   10.845    0.638 misc.py:1389(factor)
42       17    5.832    0.343    5.832    0.343 {cvxopt.base.syrk}
43       17    3.286    0.193    3.286    0.193 {cvxopt.base.gemm}
44        1    1.846    1.846    2.227    2.227 ocsvm.py:98(increment)
45       34    1.539    0.045    1.539    0.045 {cvxopt.lapack.potrf}
46      200    0.353    0.002    0.353    0.002 {cvxopt.base.gemv}
47       33    0.002    0.000    0.310    0.009 misc.py:1489(solve)
48       32    0.000    0.000    0.304    0.010 coneprog.py:2333(f4)
49       32    0.001    0.000    0.304    0.010 coneprog.py:2291(f4_no_ir)
50        2    0.000    0.000    0.251    0.125 ocsvm.py:58(gram)
51        2    0.000    0.000    0.251    0.125 pairwise.py:1164(pairwise_kernels)
52        2    0.000    0.000    0.251    0.125 pairwise.py:949(_parallel_pairwise)
53        2    0.089    0.044    0.251    0.125 pairwise.py:740(rbf_kernel)
54        2    0.072    0.036    0.161    0.081 pairwise.py:136(euclidean_distances)
55     1153    0.142    0.000    0.142    0.000 {min}
56       34    0.000    0.000    0.120    0.004 coneprog.py:1900(fG)
57       34    0.001    0.000    0.120    0.004 misc.py:801(sgemv)
58        2    0.000    0.000    0.089    0.045 extmath.py:171(safe_sparse_dot)
```

59	2	0.089	0.045	0.089	0.045 {numpy.core._dotblas.dot}
60	66	0.074	0.001	0.074	0.001 {cvxopt.blas.trsv}
61	17	0.057	0.003	0.057	0.003 {cvxopt.blas.trsm}
62	926	0.047	0.000	0.047	0.000 {method 'dot' of 'numpy.ndarray' objects}
63	2	0.000	0.000	0.029	0.014 shape_base.py:179(vstack)
64	2	0.028	0.014	0.028	0.014 {numpy.core.multiarray.concatenate}
65	17	0.000	0.000	0.019	0.001 coneprog.py:1847(fP)
66	17	0.019	0.001	0.019	0.001 {cvxopt.base.symv}
67	2	0.003	0.002	0.008	0.004 twodim_base.py:221(diag)
68	1104	0.007	0.000	0.007	0.000 {numpy.core.multiarray.where}
69	16	0.005	0.000	0.007	0.000 misc.py:422(update_scaling)
70	292	0.006	0.000	0.006	0.000 {method 'remove' of 'list' objects}
71	165	0.006	0.000	0.006	0.000 {numpy.core.multiarray.zeros}
72	90	0.003	0.000	0.005	0.000 numeric.py:966(outer)
73	129	0.001	0.000	0.004	0.000 numeric.py:136(ones)
74	1	0.004	0.004	0.004	0.004 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	3538 function calls in 102.878 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	0.000	0.000	102.878	102.878 evaluation_2.py:141(cvxopt_ocsvm)
89	1	0.051	0.051	102.878	102.878 ocsvm.py:35(fit)
90	1	2.277	2.277	102.823	102.823 ocsvm.py:62(alpha)
91	1	0.027	0.027	99.475	99.475 coneprog.py:4159(qp)
92	1	0.016	0.016	99.447	99.447 coneprog.py:1441(coneqp)
93	19	0.000	0.000	97.102	5.111 coneprog.py:1984(kktsolver)
94	19	0.893	0.047	97.102	5.111 misc.py:1389(factor)
95	19	61.022	3.212	61.022	3.212 {cvxopt.base.syrk}
96	19	22.838	1.202	22.838	1.202 {cvxopt.base.gemm}
97	38	12.080	0.318	12.080	0.318 {cvxopt.lapack.potrf}
98	224	1.822	0.008	1.822	0.008 {cvxopt.base.gemv}
99	37	0.002	0.000	1.560	0.042 misc.py:1489(solve)
100	36	0.000	0.000	1.519	0.042 coneprog.py:2333(f4)
101	36	0.001	0.000	1.518	0.042 coneprog.py:2291(f4_no_ir)
102	2	0.000	0.000	0.726	0.363 ocsvm.py:58(gram)
103	2	0.000	0.000	0.726	0.363 pairwise.py:1164(pairwise_kernels)
104	2	0.000	0.000	0.726	0.363 pairwise.py:949(_parallel_pairwise)
105	2	0.272	0.136	0.726	0.363 pairwise.py:740(rbf_kernel)
106	38	0.000	0.000	0.626	0.016 coneprog.py:1900(fG)
107	38	0.001	0.000	0.626	0.016 misc.py:801(sgemv)
108	2	0.108	0.054	0.453	0.226 pairwise.py:136(euclidean_distances)
109	74	0.361	0.005	0.361	0.005 {cvxopt.blas.trsv}
110	2	0.000	0.000	0.344	0.172 extmath.py:171(safe_sparse_dot)
111	2	0.344	0.172	0.344	0.172 {numpy.core._dotblas.dot}
112	19	0.263	0.014	0.263	0.014 {cvxopt.blas.trsm}
113	2	0.000	0.000	0.244	0.122 shape_base.py:179(vstack)
114	2	0.244	0.122	0.244	0.122 {numpy.core.multiarray.concatenate}
115	19	0.000	0.000	0.108	0.006 coneprog.py:1847(fP)
116	19	0.107	0.006	0.107	0.006 {cvxopt.base.symv}
117	2	0.031	0.015	0.104	0.052 twodim_base.py:221(diag)

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118    4   0.073  0.018  0.073  0.018 {numpy.core.multiarray.zeros}
119   18   0.013  0.001  0.016  0.001 misc.py:422(update_scaling)
120  132   0.006  0.000  0.006  0.000 {range}
121    1   0.000  0.000  0.004  0.004 ocsvm.py:45(rho)
122  108   0.003  0.000  0.003  0.000 {cvxopt.misc_solvers.scale2}
123  329   0.003  0.000  0.003  0.000 {cvxopt.blas.axpy}
124   38   0.002  0.000  0.002  0.000 {cvxopt.base.sqrt}
125    1   0.001  0.001  0.002  0.002 misc.py:250(compute_scaling)
126    4   0.000  0.000  0.002  0.000 pairwise.py:57(check_pairwise_arrays)
127  147   0.002  0.000  0.002  0.000 {cvxopt.blas.copy}
128
129
130
131 *** PROFILER RESULTS ***
132 sklearn_ocsvm (/Users/LT/Documents/Uni/MA/increOCSVM/evaluation_2.py:137)
133 function called 1 times
134
135     57 function calls in 0.180 seconds
136
137   Ordered by: cumulative time, internal time, call count
138
139   ncalls tottime percall cumtime percall filename:lineno(function)
140    1   0.000  0.000  0.180  0.180 evaluation_2.py:137(sklearn_ocsvm)
141    1   0.000  0.000  0.180  0.180 classes.py:941(fit)
142    1   0.000  0.000  0.180  0.180 base.py:99(fit)
143    1   0.000  0.000  0.179  0.179 base.py:211(_dense_fit)
144    1   0.178  0.178  0.178  0.178 {sklearn.svm.libsvm.fit}
145    1   0.001  0.001  0.001  0.001 {sklearn.svm.libsvm.set_verbosity_wrap}
146    1   0.000  0.000  0.000  0.000 validation.py:268(check_array)
147    1   0.000  0.000  0.000  0.000 validation.py:43(_assert_all_finite)
148    1   0.000  0.000  0.000  0.000 {method 'sum' of 'numpy.ndarray' objects}
149    1   0.000  0.000  0.000  0.000 _methods.py:23(_sum)
150    1   0.000  0.000  0.000  0.000 {method 'reduce' of 'numpy.ufunc' objects}
151    1   0.000  0.000  0.000  0.000 validation.py:503(check_random_state)
152    1   0.000  0.000  0.000  0.000 numeric.py:136(ones)
153    1   0.000  0.000  0.000  0.000 base.py:193(_validate_targets)
154    1   0.000  0.000  0.000  0.000 validation.py:126(_shape_repr)
155    1   0.000  0.000  0.000  0.000 getlimits.py:269(max)
156    1   0.000  0.000  0.000  0.000 getlimits.py:244(__init__)
157    1   0.000  0.000  0.000  0.000 {method 'randint' of 'mtrand.RandomState' objects}
158    1   0.000  0.000  0.000  0.000 shape_base.py:60(atleast_2d)
159    1   0.000  0.000  0.000  0.000 {method 'join' of 'str' objects}
160    5   0.000  0.000  0.000  0.000 {numpy.core.multiarray.array}
161    2   0.000  0.000  0.000  0.000 {numpy.core.multiarray.empty}
162    1   0.000  0.000  0.000  0.000 {numpy.core.multiarray.copyto}
163    3   0.000  0.000  0.000  0.000 validation.py:153(<genexpr>)
164    1   0.000  0.000  0.000  0.000 validation.py:105(_num_samples)
165    2   0.000  0.000  0.000  0.000 numeric.py:392(asarray)
166    1   0.000  0.000  0.000  0.000 {method 'copy' of 'numpy.ndarray' objects}
167    2   0.000  0.000  0.000  0.000 numeric.py:462(asanyarray)
168    3   0.000  0.000  0.000  0.000 {hasattr}
169    2   0.000  0.000  0.000  0.000 base.py:702(isspmatrix)
170    6   0.000  0.000  0.000  0.000 {len}
171    3   0.000  0.000  0.000  0.000 {isinstance}
172    1   0.000  0.000  0.000  0.000 base.py:203(_warn_from_fit_status)
173    1   0.000  0.000  0.000  0.000 {method 'index' of 'list' objects}
174    2   0.000  0.000  0.000  0.000 {callable}
175    1   0.000  0.000  0.000  0.000 {method 'append' of 'list' objects}
```

```
176      1   0.000   0.000   0.000   0.000 {method 'disable' of '_lsprof.Profiler' objects}
177      0   0.000           0.000           profile:0(profiler)
178
179
180
181   Process finished with exit code 0
182
```