

```
1 C:\Users\kevin\Anaconda3\python.exe C:/Users/kevin/
  Documents/GitHub/kddm2/src/classify.py
2
3 ### PREPROCESSING DATA ###
4 -- Vectorization
5 -- Feature Selection
6
7 Top 30 Features:
8          token          score   p-val
9 0        whoz  3256479.3850465794  0.0
10 1      12406  284564.4318560777  0.0
11 2      12404  284564.4318560777  0.0
12 3      12410  284564.4318560777  0.0
13 4      12409  284564.4318560777  0.0
14 5      12408  284564.4318560777  0.0
15 6      12407  284564.4318560777  0.0
16 7      12403  284564.4318560777  0.0
17 8      12405  284564.4318560777  0.0
18 9      rcruit 255015.18535040104  0.0
19 10     undrscor 248771.93372878063  0.0
20 11     frqunt  201390.57230956518  0.0
21 12     joind  141617.93737829497  0.0
22 13     hmisphr 134443.167187048  0.0
23 14     warnr  113431.96533177882  0.0
24 15 6023215017 113359.67786291931  0.0
25 16     rspctivli 107409.5067758057  0.0
26 17     focusd  104567.48415556476  0.0
27 18     onetouch 83067.10862383277  0.0
28 19      85022  76289.29430120121  0.0
29 20     lmmon  76143.46268086744  0.0
30 21      sris  74664.1344851923  0.0
31 22     espn1  67402.00647141424  0.0
32 23      bytz  65876.37076273338  0.0
33 24     azaolcom 65476.78593922924  0.0
34 25      xcitd  61378.596444831695  0.0
35 26     continu 61125.053802030176  0.0
36 27     stentophon 59873.22757635676  0.0
37 28     alignmnt 57063.186828820355  0.0
38 29      ladr  44894.438853959065  0.0
39
40
41 ### CLASSIFICATION ###
42 Training time: 35251.124 s
43
44
```

```
45
46
47
48
49 Prediction time: 19025.113 s
50
51 C:\Users\kevin\Anaconda3\lib\site-packages\sklearn\metrics
  \classification.py:1074: UndefinedMetricWarning: Precision
    and F-score are ill-defined and being set to 0.0 in
    labels with no predicted samples.
52     'precision', 'predicted', average, warn_for)
53
54
55
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57
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59
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61
62
63
64
```

		precision	recall	f1-	
	score	support			
56	.76	200	0.98	0.62	0
57	.99	#2.martin@enron.com	1.00	0.99	0
58	.99	81			
59	.99	#23.training@enron.com	1.00	0.98	0
60	.93	126			
61	.93	#24.training@enron.com	0.95	0.92	0
62	.93	843			
63	.93	#25.training@enron.com	1.00	0.87	0
64	.93	79			
65	.93	#26.training@enron.com	0.88	0.98	0
66	.93	173			
67	.76	#28.training@enron.com	1.00	0.62	0
68	.76	73			
69	.00	#29.training@enron.com	1.00	1.00	1
70	.00	292			
71	.96	#30.training@enron.com	1.00	0.93	0
72	.96	246			
73	.96	-nikole@excite.com	0.99	0.93	0
74	.96	135			

65		.@enron.com	1.00	0.71
66	0.83	120		
67	0.99	.ann@enron.com	1.00	0.99
68	0.90	200		
69	0.96	.art@enron.com	1.00	0.82
70	0.90	163		
71	0.96	.barbara@enron.com	1.00	0.93
72	0.41	83		
73	0.99	.bill@enron.com	0.47	0.36
74	0.99	145		
75	0.99	.brady@enron.com	1.00	0.98
76	0.99	104		
77	0.99	.campbell@enron.com	1.00	0.99
78	0.99	87		
79	0.97	.delaney@enron.com	0.99	0.94
80	0.97	125		
81	0.94	.derek@enron.com	0.91	0.98
82	0.94	176		
83	0.99	.diana@enron.com	1.00	0.97
84	0.99	142		
85	0.96	.dominic@enron.com	1.00	0.92
86	0.96	71		
87	0.08	.dorothy@enron.com	1.00	0.04
88	0.08	23		
89	1.00	.dow@enron.com	1.00	0.99
90	1.00	185		
91	0.99	.eber@enron.com	1.00	0.98
92	0.99	88		
93	0.96	.evelyn@enron.com	0.98	0.94
94	0.96	318		

80		.hollis@enron.com	1.00	0.95
81	0.97	242		
82	1.00	.jack@enron.com	1.00	0.99
83	0.95	115		
84	0.83	.jan@enron.com	0.97	0.93
85	0.83	384		
86	1.00	.jeff@enron.com	0.86	0.81
87	1.00	228		
88		.john@enron.com	1.00	0.99
89	1.00	129		
90	0.97	.jon@enron.com	1.00	0.94
91	1.00	101		
92		.karen@enron.com	1.00	1.00
93	1.00	74		
94	0.89	.keily@enron.com	0.96	0.84
	0.89	399		
	0.84	.keith@enron.com	0.86	0.82
	0.84	204		
	1.00	.lenny@enron.com	1.00	1.00
	1.00	954		
	0.98	.linda@enron.com	1.00	0.96
	0.98	52		
	1.00	.lloyd@enron.com	1.00	0.99
	1.00	250		
	1.00	.mani@enron.com	1.00	1.00
	1.00	43		
	0.97	.marc@enron.com	1.00	0.94
	0.97	335		
	0.85	.martin@enron.com	0.95	0.77
	0.85	82		

95		.mathis@enron.com	1.00	0.87
96	0.93	83		
97	0.83	.mike@enron.com	0.93	0.75
98	0.86	141		
99	0.86	.mitchell@enron.com	0.98	0.77
100	0.76	69		
101	0.76	.mower@enron.com	0.97	0.62
102	0.97	178		
103		.odonnell@enron.com	0.99	0.95
104	0.97	184		
105		.parking@enron.com	0.94	1.00
106	0.97	113		
107		.peder@enron.com	0.85	0.79
108	0.82	414		
109		.phil@enron.com	0.98	1.00
110	0.99	103		
111		.revelt@enron.com	1.00	0.91
112	0.95	145		
113		.robert@enron.com	1.00	0.98
114	0.99	105		
115		.stacy@enron.com	0.95	1.00
116	0.97	97		
117		.thompson@enron.com	1.00	0.99
118	0.99	87		
119		.tom@enron.com	1.00	0.98
120	0.99	143		
121		recipients/cn=jtaylor3@enron.com	/o=enron/ou=eu/cn=	
122	0.99	3833	1.00	0.99
123		=recipients/cn=jcasas@enron.com	/o=enron/ou=na/cn	
124	0.88	111	0.96	0.81

110	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=137975ff-a63f007c-86256945-5a199e@enron.com	0.96	0.89
	0.93	154	
111	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=41bc9f29-eb12503a-86256603-4d8b0e@enron.com	0.93	0.28
	0.43	222	
112	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=6a1ae424-164932f1-862564cf-516c48@enron.com	0.44	0.90
	0.59	1434	
113	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=8b350b76-1ddd01ec-86256655-47240f@enron.com	0.98	0.79
	0.87	57	
114	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=90cf0ed1-27e2e701-862564b3-6b8593@enron.com	0.99	0.96
	0.97	741	
115	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=9b56897f-946f89a1-86256904-4d13b1@enron.com	0.99	0.95
	0.97	124	
116	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=9f0c38c7-5bad0701-86256880-8018fe@enron.com	0.94	0.90
	0.92	94	
117	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=a3a4cb81-65db1a4f-862569e7-6cfe2f@enron.com	0.86	0.85
	0.86	112	
118	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=a478079f-55e1f3b0-862566fa-612229@enron.com	1.00	0.70
	0.82	67	
119	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=d02b966f-3a3c4971-862564a4-6ec11d@enron.com	1.00	0.99
	1.00	423	
120	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=d7042640-40e5b5ac-86256999-565b59@enron.com	0.99	0.93
	0.96	186	
121	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=d9c380a1-19ab672b-862564a6-53454f@enron.com	1.00	1.00
	1.00	180	
122	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=e38e0fd8-121f02da-8625649f-476abf@enron.com	1.00	0.74
	0.85	62	
123	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=e551a2eb-678c71b5-86256713-7d8173@enron.com	0.98	0.95
	0.97	120	
124	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=f049c2b2-67ae7678-8625694a-718156@enron.com	0.77	0.89
	0.82	580	

File - unknown

125	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=f21d9b15-25189ad0-8625653f-482bf6@enron.com	0.97	0.35
	0.51 168		
126	/o=enron/ou=na/cn=recipients/cn=notesaddr/cn=fd7192f5-d452ccd9-862564b4-4aaa7d@enron.com	0.99	0.58
	0.73 150		
127	/o=enron/ou=na/cn=recipients/cn=rsmith25@enron.com	1.00	0.96
	0.98 152		
128	/o=enron/ou=na/cn=recipients/cn=tellis3@enron.com	1.00	0.93
	0.96 42		
129	/o=enron/ou=na/cn=recipients/cn=tngo@enron.com	0.87	0.58
	0.70 189		
130	05.01.01.migration@enron.com	1.00	1.00
	1.00 60		
131	05196715@juno.com	1.00	0.95
	0.98 166		
132	1.facilities@enron.com	0.94	0.87
	0.90 273		
133	1353@aol.com	0.89	0.66
	0.76 273		
134	1805@pmicim.com	0.77	0.72
	0.75 302		
135	2.ews@enron.com	0.98	0.92
	0.95 824		
136	211-6155@mciemail.com	0.98	0.74
	0.84 183		
137	2740741@skytel.com	0.98	0.98
	0.98 362		
138	2812677295@page.metrocall.com	1.00	0.86
	0.92 129		
139	3.ews@enron.com	0.70	0.64
	0.67 526		

140		3973996@skytel.com	0.98	0.96
141	0.97	335		
142		3@enron.com	0.98	0.99
143	0.99	237		
144		3toyota@cadvision.com	1.00	0.99
145	1.00	129		
146		4069450@archwireless.net	1.00	0.97
147	0.99	149		
148		40ect@enron.com	1.00	0.99
149	1.00	106		
150		40ees@enron.com	0.99	0.94
151	0.97	374		
152		40enron@enron.com	0.97	0.64
153	0.77	96		
154		40newpower@enron.com	1.00	0.84
155	0.91	130		
156		5.ews@enron.com	0.99	0.92
157	0.95	161		
158		548@britishparts.com	0.98	0.99
159	0.98	169		
160		5594935@skytel.com	0.95	0.91
161	0.93	351		
162		5697594@skytel.com	1.00	0.47
163	0.64	168		
164		6202354@skytel.com	0.66	0.96
165	0.78	152		
166			6f4b8768-	
167	8c722ce7-86256887-735eaa@enron.com		1.00	0.99
168	1.00	116		
169		7028587@skytel.com	1.00	0.93
170	0.96	110		

155		7137160795@pagenet.com	1.00	0.96
	0.98	166		
156		7139069876@skytel.com	0.90	0.41
	0.56	360		
157		7409948@enron.com	0.56	0.78
	0.65	153		
158		7409949@skytel.com	0.74	0.71
	0.72	635		
159		7409950@skytel.com	0.97	0.88
	0.93	171		
160		75361.622@compuser.com	0.97	0.61
	0.75	217		
161		75361.622@compuserve.com	0.99	0.98
	0.99	115		
162		7599039@skytel.com	1.00	0.99
	1.00	174		
163		877.341.7930@skytel.com	1.00	0.86
	0.93	65		
164		8772371787@pagenetmessage.net	1.00	1.00
	1.00	191		
165		8772374503@pagenetmessage.net	1.00	0.99
	0.99	389		
166		8772374503@pagenetmessage.net	0.78	0.78
	0.78	114		
167		8772374506@pagenetmessage.net	1.00	1.00
	1.00	311		
168		8772374506@pagenetmessage.net	0.64	0.57
	0.60	523		
169		8773417930@skytel.com	0.98	0.99
	0.99	3482		

170		8774619489@skytel.com	0.99	0.97
	0.98	138		
171		8774754543@skytel.com	1.00	1.00
	1.00	146		
172		8774820206@pagenetmessage.net	0.98	0.95
	0.97	322		
173		8774892073@pagenetmessage.net	1.00	0.98
	0.99	130		
174		8774984248@pagenetmessage.net	0.93	0.97
	0.95	116		
175		8775104370@skytel.com	1.00	0.94
	0.97	274		
176		8775862949@skytel.com	1.00	0.96
	0.98	91		
177		8777208398.4891939@pagenetmessage.net	0.98	0.
	96	0.97	349	
178		8777208398.4891940@pagenetmessage.net	1.00	0.
	96	0.98	159	
179		8777865122@skytel.com	0.00	0.00
	0.00	59		
180		8778044255@skytel.com	0.98	0.88
	0.93	237		
181		8778552081@pagenetmessage.net	1.00	0.91
	0.96	186		
182		8886424977@pagenetmessage.net	0.98	0.39
	0.56	131		
183		8887107934@pagenetmessage.net	0.81	0.41
	0.54	225		
184		8887107935@pagenetmessage.net	0.99	0.97
	0.98	188		

185		8887409950@skytel.com	0.98	0.96
	0.97	1352		
186		8889069761@skytel.com	0.99	1.00
	1.00	105		
187		8889069876@skytel.com	0.77	0.51
	0.61	167		
188		8889167184@skytel.com	0.94	0.84
	0.89	549		
189		8889167186@skytel.com	1.00	1.00
	1.00	223		
190		9069761@enron.com	1.00	0.90
	0.95	223		
191		9069761@skytel.com	1.00	0.96
	0.98	129		
192		9069876@skytel.com	0.98	0.93
	0.96	415		
193		9069878@skytel.com	0.99	1.00
	0.99	843		
194		9079876@skytel.com	0.97	0.98
	0.98	871		
195		9162262@skytel.com	1.00	0.85
	0.92	130		
196		9167184@skytel.com	0.99	0.99
	0.99	107		
197		9167185@skytel.com	0.97	0.93
	0.95	112		
198		9167188@enron.com	0.72	0.97
	0.82	6618		
199		9169761@skytel.com	1.00	0.89
	0.94	186		

200		<""myers@enron.com>	0.94	0.62
	0.74	125		
201		<""thompson@enron.com>	0.99	0.98
	0.99	285		
202		kristina_mourdaunt@enron.net@enron.com		<"
	0.45	0.56	246	0.76
203		<"mark_kopinski/intl/acim/americancentury "@americancentury.com@enron.com>	1.00	0.82
	0.90	84		
204		<"sbigalow"@enron.com>	1.00	1.00
	1.00	100		
205		<caroline"."harper@enron.com>	1.00	0.89
	0.94	56		
206		<carter"."tamara@enron.com>	1.00	0.96
	0.98	594		
207		<claudia"."robinson@enron.com>	1.00	1.00
	1.00	96		
208		<deborah"."greenwood@enron.com>	1.00	0.97
	0.99	159		
209		<douglass"."dan@enron.com>	1.00	0.93
	0.96	241		
210		<ellenberg"."mark@enron.com>	1.00	0.94
	0.97	125		
211		<giron"."carlos@enron.com>	0.66	0.23
	0.34	321		
212		<hyde"."chris@enron.com>	1.00	0.89
	0.94	225		
213		<joe"."brenner@enron.com>	0.83	0.57
	0.68	350		
214		<jr."."lawrence@enron.com>	0.99	0.88
	0.93	133		

215	<kalembka". "lech@enron.com>	0.95	0.84
	0.90 212		
216	<katz". "andy@enron.com>	1.00	0.98
	0.99 87		
217	<maria". "chioldi@enron.com>	0.95	0.95
	0.95 215		
218	<ornstein". "chantel@enron.com>	1.00	0.98
	0.99 236		
219	rasmani". "bhattacharya@enron.com>	1.00	0.98
	0.99 219		<
220	<ronn". "ehud@enron.com>	0.99	0.99
	0.99 231		
221	<sanchez". "barbara@enron.com>	0.99	0.97
	0.98 233		
222	<susan". "mara@enron.com>	0.79	0.63
	0.70 177		
223	<tom". "riley@enron.com>	0.99	0.96
	0.97 291		
224	<v". "proctor@enron.com>	0.96	0.83
	0.89 427		
225	<wide". "ken@enron.com>	1.00	0.90
	0.95 174		
226	<young". "bennett@enron.com>	1.00	0.97
	0.98 128		
227	@enron.com	0.99	0.98
	0.99 156		
228	_morgan@kindermorgan.com	0.92	0.85
	0.88 409		
229	_thurmond@unitedddc.com	1.00	1.00
	1.00 360		

230		a&a.1@enron.com	0.98	0.99
231	0.98	320		
		a&a.2@enron.com	1.00	0.97
232	0.99	196		
		a&a.leads@enron.com	0.99	0.94
233	0.97	233		
		a&a.pool@enron.com	0.99	0.90
234	0.94	325		
		a&a.reps@enron.com	0.58	0.82
235	0.68	1289		
		-l-brian@fred.masterpage.com.pl	1.00	0.82
	0.90	76		a
236		a-mheard@houston.rr.com	0.99	0.96
		0.98	388	
237		a..allen@enron.com	1.00	0.96
	0.98	296		
238		a..anderson@enron.com	1.00	0.99
	1.00	121		
239		a..aune@enron.com	1.00	0.94
	0.97	246		
240		a..austin@enron.com	0.98	0.99
	0.98	612		
241		a..ayres@enron.com	1.00	1.00
	1.00	31		
242		a..bibi@enron.com	1.00	0.99
	0.99	429		
243		a..boe@enron.com	0.94	0.70
	0.80	202		
244		a..bowen@enron.com	1.00	0.97
	0.98	188		

245		a..brown@enron.com	0.99	0.87
	0.93	119		
246		a..campos@enron.com	1.00	0.92
	0.96	53		
247		a..casas@enron.com	1.00	0.39
	0.56	67		
248		a..collins@enron.com	0.73	0.55
	0.63	280		
249		a..cordova@enron.com	1.00	0.95
	0.97	93		
250		a..cote@enron.com	0.99	0.96
	0.97	235		
251		a..cummings@enron.com	1.00	0.99
	1.00	1132		
252		a..davis@enron.com	0.78	0.90
	0.83	182		
253		a..fox@enron.com	1.00	0.90
	0.95	195		
254		a..garcia@enron.com	0.99	0.75
	0.85	225		
255		a..gomez@enron.com	1.00	0.98
	0.99	505		
256		a..helfrich@enron.com	1.00	1.00
	1.00	169		
257		a..holmes@enron.com	1.00	1.00
	1.00	570		
258		a..hope@enron.com	0.96	0.49
	0.65	108		
259		a..howard@enron.com	0.99	0.98
	0.98	294		

260	a..hudler@enron.com	0.99	1.00
	1.00 113		
261	a..hueter@enron.com	1.00	1.00
	1.00 643		
262	a..hughes@enron.com	1.00	0.99
	1.00 162		
263	a..johnson@enron.com	1.00	0.99
	0.99 419		
264	a..katz@enron.com	0.89	1.00
	0.94 8		
265	a..knudsen@enron.com	0.91	0.49
	0.63 109		
266	a..lancaster@enron.com	1.00	0.95
	0.97 81		
267	a..lindholm@enron.com	1.00	1.00
	1.00 129		
268	a..lopez@enron.com	0.97	0.99
	0.98 207		
269	a..martin@enron.com	1.00	0.99
	0.99 286		
270	a..mausser@enron.com	0.96	0.85
	0.90 236		
271	a..miley@enron.com	1.00	1.00
	1.00 102		
272	a..price@enron.com	0.97	0.83
	0.90 89		
273	a..rice@enron.com	0.98	1.00
	0.99 3113		
274	a..roberts@enron.com	0.60	0.54
	0.57 507		

275	a..robison@enron.com	1.00	0.39
276	0.56 103	0.68	0.92
277	a..rodriguez@enron.com	1.00	0.97
278	0.78 650	1.00	0.94
279	a..ryan@enron.com	0.98	0.74
280	0.98 168	0.85	0.76
281	a..shankman@enron.com	0.97	213
282	a..smith@enron.com	0.84	180
283	a..soo@enron.com	0.85	229
284	a..summerford@enron.com	0.84	206
285	a..terlip@enron.com	0.65	268
286	a..walker@enron.com	0.65	0.59
287	1.00 18	0.65	0.71
288	a.ashmore@enron.com	1.00	0.99
289	0.98 206	1.00	0.99
	a.capolongo@morganstanley.com	1.00	1.00
	1.00 138	1.00	1.00
	a.capolongo@msdw.com	0.98	0.97
	0.86 551	0.86	0.76
	a.connolly@enron.com	1.00	1.00
	1.00 335	1.00	1.00
	a.devries@worldnet.att.net	0.85	0.97
	0.85 121	0.85	0.75
	a.emerson@enron.com	0.41	0.92
	0.41 230	0.41	0.26

290	a.gelotti@enron.com	1.00	0.54
	0.70 54		
291	a.hernandez@enron.com	0.98	0.88
	0.93 50		
292	a.k.matheson@enron.com	0.64	0.50
	0.56 533		
293	a.nichols@enron.com	1.00	0.94
	0.97 70		
294	a.perez@enron.com	0.98	0.85
	0.91 500		
295	a.plauche@enron.com	0.93	0.92
	0.93 622		
296	a.ramirez@enron.com	1.00	1.00
	1.00 265		
297	a.taylor@enron.com	0.96	0.42
	0.59 102		
298	a2street@hewitt.com	0.39	0.78
	0.52 637		
299	a@epsa.org	0.97	0.83
	0.90 342		
300	aabbcece@airmail.net	0.99	0.97
	0.98 342		
301	aadedeji@risk.co.uk	0.85	0.85
	0.85 173		
302	aahanch@enron.com	1.00	0.91
	0.95 126		
303	aahmad@enron.com	0.97	0.98
	0.98 119		
304	aaldous@watarts.uwaterloo.ca	1.00	0.87
	0.93 116		

305		aalkhay@enron.com	0.96	0.59
	0.73	119		
306		aallbritton@velaw.com	0.76	0.53
	0.63	318		
307		aameece@quinngillespie.com	0.92	0.62
	0.74	186		
308		aamir.maniar@enron.com	1.00	0.23
	0.38	77		
309		aamodt.david@enron.com	0.89	0.67
	0.77	315		
310		aamron@wexford.com	0.83	0.51
	0.63	256		
311		aandy.ly@enron.com	0.98	0.80
	0.88	71		
312		aarati.sivasubramanian@enron.com	0.98	0.99
	0.99	942		
313		aare-.managers@enron.com	1.00	0.88
	0.93	97		
314		aaron.adams@enron.com	1.00	0.79
	0.88	104		
315		aaron.armstrong@enron.com	0.98	0.86
	0.92	416		
316		aaron.berutti@enron.com	1.00	0.45
	0.62	44		
317		aaron.brown@enron.com	1.00	1.00
	1.00	145		
318		aaron.green@enron.com	1.00	0.98
	0.99	163		
319		aaron.jang@enron.com	0.95	0.93
	0.94	107		

320	aaron.klemm@enron.com	1.00	0.98
	0.99 177		
321	aaron.martinsen@enron.com	0.97	0.66
	0.78 235		
322	aaron.stai@enron.com	1.00	0.91
	0.95 85		
323	aaron_brown@enron.com	1.00	0.99
	0.99 201		
324	aaronmendelson@hotmail.com	1.00	1.00
	1.00 1208		
325	aaronow@enron.com	1.00	0.97
	0.99 175		
326	aashburn@mindspring.com	0.95	0.93
	0.94 209		
327	aavalos@pnm.com	0.97	0.93
	0.95 40		
328	aazccb@swbell.net	0.98	0.94
	0.96 149		
329	aaziz@shearman.com	1.00	1.00
	1.00 17		
330	aballar@enron.com	1.00	0.67
	0.80 148		
331	abannes@amrrresearch.com	1.00	0.98
	0.99 97		
332	abarnett@home.com	1.00	0.97
	0.99 79		
333	abassis@enron.com	1.00	1.00
	1.00 611		
334	abb@eslawfirm.com	1.00	0.18
	0.31 146		

335		abbeysmather@sempra.com	0.81	0.91
	0.86	352		
336		abel.chris@enron.com	1.00	0.98
	0.99	52		
337		abercrombie.patrick@enron.com	1.00	0.14
	0.25	57		
338		abernath@haas.berkeley.edu	0.99	0.98
	0.98	187		
339		aberton@enron.com	1.00	0.96
	0.98	348		
340		abha.kaul@enron.com	0.99	0.76
	0.86	90		
341		abhijeet.naik@enron.com	0.98	0.90
	0.94	171		
342		abi.nix@compaq.com	1.00	0.99
	1.00	2396		
343		abigail.taylor@enron.com	1.00	0.99
	0.99	87		
344		ablumrosen@aol.com	0.88	0.52
	0.65	390		
345		aborgatt@azurix.com	0.95	0.79
	0.86	610		
346		aboytinck@msn.com	0.93	0.41
	0.57	200		
347		abraham.solomon@mustangeng.com	0.98	0.97
	0.97	304		
348		abraham5@flash.net	0.99	0.99
	0.99	164		
349		abrarr.sait@enron.com	0.96	0.88
	0.92	138		

350	abrock@poloralphlauren.com 0.67	12	1.00	0.50
351	abrown4@enron.com 0.91	155	1.00	0.83
352	abullrich@cera.com 1.00	71	1.00	1.00
353	abuse@msn.com 0.57	183	0.95	0.40
354	aca@associatedcounsel.com 0.58	277	0.76	0.47
355	acaeg@yahoo.com 0.94	370	0.97	0.91
356	acahanchian@zdnetaonebox.com 0.99	97	1.00	0.99
357	acarroll@enron.com 0.99	36	1.00	0.97
358	ace.roman@enron.com 0.88	221	0.99	0.79
359	ace.roman@ubsw.com 0.91	57	0.88	0.93
360	acey.nash@enron.com 0.82	866	0.79	0.86
361	achavez1@elp.rr.com 0.98	593	1.00	0.96
362	achim.lindhorst@enron.com 1.00	508	1.00	1.00
363	achin@colcnr.com 1.00	86	1.00	1.00
364	achokshi99@yahoo.com 1.00	219	1.00	1.00

365	achokshi@firstcallassociates.com 0.62	1179	0.49	0.84
366		ack@a-klaw.com 0.95	0.98	0.93
367		ack@aelaw.com 0.99	1.00	0.98
368		ackerman.gary@enron.com 0.43	0.87	0.29
369		aclhart@aol.com 0.99	1.00	0.99
370		acohen@gotostategic.com 0.99	1.00	0.99
371		acolpea@enron.com 0.98	0.98	0.97
372		acomnes@enron.com 0.55	0.95	0.38
373		acomnes@prodigy.net 0.84	0.97	0.74
374		aconge@azurix.com 0.98	1.00	0.95
375		acoock@utilicorp.com 0.89	0.92	0.86
376		acullen@firstcallassociates.com 0.96	0.97	0.95
377		aculver@houston.org 0.95	0.99	0.92
378		acurles@enron.com 0.99	1.00	0.98
379		acurrry@velaw.com 1.00	1.00	1.00

380		adadson@enron.com	1.00	0.99
	0.99	97		
381		adam.bayer@enron.com	1.00	1.00
	1.00	384		
382		adam.brulinski@enron.com	0.97	0.90
	0.93	124		
383		adam.caldwell@enron.com	0.71	0.29
	0.42	126		
384		adam.cooper@enron.com	1.00	0.97
	0.98	1460		
385		adam.deridder@enron.com	1.00	0.81
	0.90	59		
386		adam.duguid@enron.com	0.72	0.56
	0.63	360		
387		adam.dushinske@enron.com	0.99	0.89
	0.94	184		
388		adam.giannone@enron.com	1.00	1.00
	1.00	163		
389		adam.gross@enron.com	0.99	0.95
	0.97	578		
390		adam.johnson@enron.com	1.00	0.95
	0.98	403		
391		adam.metry@enron.com	1.00	0.95
	0.97	238		
392		adam.overfield@enron.com	0.99	0.97
	0.98	2648		
393		adam.plager@enron.com	0.78	0.70
	0.74	568		
394		adam.pollock@enron.com	1.00	0.98
	0.99	234		

395	adam.r.bayer@vanderbilt.edu 0.99	357	1.00	0.99
396	adam.siegel@enron.com 0.97	617	0.99	0.96
397	adam.stevens@enron.com 0.99	539	0.99	1.00
398	adam.thomas@enron.com 0.91	120	0.98	0.84
399	adam.turner@enron.com 0.84	2550	0.77	0.92
400	adam.tyrrell@enron.com 1.00	211	1.00	1.00
401	adam.umanooff@enron.com 0.99	126	1.00	0.98
402	adam.wais@enron.com 0.97	63	1.00	0.94
403	adam.watts@enron.com 0.89	69	1.00	0.80
404	adam@talcomp.com 0.97	113	0.99	0.96
405	adam_auten@xtoenergy.com 0.83	256	0.98	0.73
406	adambob@stat.rice.edu 1.00	95	1.00	1.00
407	adamk@sheltercorp.com 1.00	228	1.00	1.00
408	adamon@deloitte.com 0.10	78	1.00	0.05
409	adamon@dttus.com 1.00	219	1.00	1.00

410		adamsd34@hongkong.com	0.91	0.49
411	0.64	182		
		adamsotj@bp.com	0.97	0.72
412	0.83	103		
		adarsh.vakharia@enron.com	0.91	0.77
413	0.83	173		
		adauzat@lsu.edu	1.00	0.97
414	0.99	36		
		add.ibanez@enron.com	1.00	0.99
415	0.99	1975		
		addison.donavon@hydro.qc.ca	1.00	0.99
416	1.00	438		
		adefelice@ggfcmk.com	0.99	0.91
417	0.95	338		
		adel.morris@enron.com	0.50	0.87
418	0.64	873		
		adel.rizkalla@enron.com	0.90	0.97
419	0.94	215		
		adel.robinson@enron.com	0.99	0.94
420	0.97	139		
		adela.briner@trox.com	1.00	0.91
421	0.95	34		
		adele.raspe2@pseg.com	1.00	0.96
422	0.98	24		
		adiaz@enron.com	0.99	0.96
423	0.97	93		
424		avg / total	0.92	0.89
425	0.89	115641		
426	Accuracy: 0.894890220597			

```
427 Confusion Matrix:  
428  
429 [[125    0    0 ...,    0    0    0]  
430 [  0    80   0 ...,    0    0    0]  
431 [  0    0 123 ...,    0    0    0]  
432 ...,  
433 [  0    0    0 ...,   31    0    0]  
434 [  0    0    0 ...,    0   23    0]  
435 [  0    0    0 ...,    0    0   89]]  
436  
437 Process finished with exit code 0  
438
```