RESULTADOS CONJUNTO DE DATOS 20NewsGroup

COUNT-VECTORIZER

SVC

Métricas en el conjunto de prueba:

Metricas en er conjunto d	e prueba.			
	precision	recall	f1-score	support
alt.atheism	0.74	0.78	0.76	148
comp.graphics	0.62	0.79	0.70	199
comp.os.ms-windows.misc	0.74	0.73	0.74	195
comp.sys.ibm.pc.hardware	0.66	0.65	0.66	191
comp.sys.mac.hardware	0.79	0.78	0.78	183
comp.windows.x	0.84	0.79	0.81	195
misc.forsale	0.67	0.84	0.74	191
rec.autos	0.84	0.85	0.84	205
rec.motorcycles	0.91	0.91	0.91	222
rec.sport.baseball	0.89	0.87	0.88	209
rec.sport.hockey	0.95	0.90	0.92	193
sci.crypt	0.86	0.84	0.85	191
sci.electronics	0.78	0.74	0.76	221
sci.med	0.88	0.82	0.85	201
sci.space	0.92	0.83	0.87	184
soc.religion.christian	0.88	0.83	0.85	222
talk.politics.guns	0.84	0.82	0.83	158
talk.politics.mideast	0.92	0.88	0.90	194
talk.politics.misc	0.80	0.80	0.80	141
talk.religion.misc	0.75	0.69	0.72	123
-				
accuracy			0.81	3766
macro avg	0.81	0.81	0.81	3766
weighted avg	0.82	0.81	0.81	3766

									Ma	atriz	de	Con	fusi	ón									
	alt.atheism -	116	1	0	0	1	0	3	0	1	0	0	1	1	1	2	7	1	1	5	7		- 200
	comp.graphics -	4	158	5	8	2	7	5	1	1	1	0	1	3	0	1	0	0	1	0	1		
	comp.os.ms-windows.misc -	0	17	142	12	3	8	5	0	0	1	0	3	0	0	1	0	1	1	0	1		- 175
	comp.sys.ibm.pc.hardware -	3	12	19	125	10	2	12	1	0	0	0	0	5	1	1	0	0	0	0	0		
	comp.sys.mac.hardware -	1	4	7	12	143	1	5	0	1	1	0	1	6	0	0	0	0	1	0	0		
	comp.windows.x -	1	15	11	2	1	154	2	1	0	0	0	0	5	0	0	1	1	0	0	1		- 150
	misc.forsale -	0	3	0	5	4	0	161	2	3	1	1	1	3	1	0	3	1	1	0	1		
as	rec.autos -	0	1	2	4	0	1	8	174	4	0	1	0	7	0	0	0	0	1	2	0		- 125
ader	rec.motorcycles -	0	1	1	1	1	1	1	6	201	2	0	0	1	2	1	1	1	0	1	0		
Etiquetas Verdaderas	rec.sport.baseball -	4	3	0	1	0	0	2	2	0	181	6	0	2	1	0	0	1	2	2	2		
as V	rec.sport.hockey -	1	1	0	2	1	1	2	0	1	6	174	0	2	0	1	0	0	0	1	0		- 100
net	sci.crypt -	0	12	0	0	1	3	3	0	1	1	1	160	1	1	0	1	3	0	2	1		
ΕĔ	sci.electronics -	3	7	2	11	8	0	11	5	2	0	0	4	163	3	0	0	0	1	0	1		- 75
	sci.med -	3	5	0	2	2	0	2	6	2	2	0	1	3	164	3	2	0	0	2	2		
	sci.space -	0	4	0	0	3	2	6	2	2	1	0	2	3	3	152	0	2	1	0	1		
	soc.religion.christian -	6	2	0	1	0	2	7	0	0	1	0	1	1	5	0	185	0	0	1	10		- 50
	talk.politics.guns -	2	2	0	2	1	0	1	3	1	2	1	6	0	1	0	0	129	0	7	0		
	talk.politics.mideast -	3	2	0	0	1	1	3	0	1	0	0	2	1	3	0	0	1	171	5	0		- 25
	talk.politics.misc -	4	2	0	0	0	0	1	5	0	4	0	3	0	1	0	0	6	1	113	1		
	talk.religion.misc -	6	2	2	0	0	0	2	0	0	0	0	0	1	0	3	11	6	4	1	85		- 0
		alt.atheism -	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale -	rec.autos -	rec.motorcycles -	rec.sport.baseball -	rec.sport.hockey -	sci.crypt -	sci.electronics -	sci.med -	sci.space -	soc.religion.christian -	talk.politics.guns -	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc -		- 0

Etiquetas Predichas

Random forest

Métricas en el conjunto de prueba:

ricerreas en er conjuntes a	precision	recall	f1-score	support
alt.atheism	0.77	0.72	0.74	148
comp.graphics	0.69	0.78	0.73	199
comp.os.ms-windows.misc	0.74	0.76	0.75	195
comp.sys.ibm.pc.hardware	0.76	0.71	0.73	191
comp.sys.mac.hardware	0.84	0.83	0.83	183
comp.windows.x	0.83	0.83	0.83	195
misc.forsale	0.63	0.84	0.72	191
rec.autos	0.82	0.82	0.82	205
rec.motorcycles	0.96	0.93	0.94	222
rec.sport.baseball	0.92	0.91	0.92	209
rec.sport.hockey	0.90	0.96	0.93	193
sci.crypt	0.89	0.86	0.88	191
sci.electronics	0.82	0.62	0.71	221
sci.med	0.88	0.83	0.86	201
sci.space	0.83	0.90	0.87	184
soc.religion.christian	0.73	0.92	0.81	222
talk.politics.guns	0.73	0.89	0.81	158

talk.politics.mideast	0.95	0.92	0.93	194
talk.politics.misc	0.88	0.68	0.77	141
talk.religion.misc	0.89	0.33	0.49	123
accuracy			0.81	3766
macro avg	0.82	0.80	0.80	3766
weighted avg	0.82	0.81	0.81	3766

Matriz de Confusión alt.atheism - 106 0 0 0 comp.graphics - 3 156 13 comp.os.ms-windows.misc - 0 11 148 14 5 0 - 175 comp.sys.ibm.pc.hardware - 1 152 4 comp.sys.mac.hardware - 0 6 0 0 0 0 0 comp.windows.x - 0 16 0 0 162 2 0 0 0 1 - 150 8 1 0 0 misc.forsale - 0 3 0 11 169 rec.autos - 1 5 Etiquetas Verdaderas - 125 rec.motorcycles - 0 1 0 rec.sport.baseball - 1 3 - 100 0 rec.sport.hockey - 0 0 sci.electronics - 0 16 75 sci.space - 1 - 50 soc.religion.christian - 6 0 0 0 1 talk.politics.guns - 0 0 0 0 2 1 1 1 0 0 0 3 1 talk.politics.mideast - 1 - 25 talk.politics.misc - 3 20 0 0 talk.religion.misc - 13 0 0 37 16 - 0 comp.graphics comp.sys.ibm.pc.hardware comp.sys.mac.hardware misc.forsale rec.motorcycles soc.religion.christian talk.politics.guns talk.politics.mideast talk.politics.misc talk.religion.misc alt.atheism comp.os.ms-windows.misc comp.windows.x rec.autos rec.sport.baseball rec.sport.hockey sci.crypt sci.electronics sci.med sci.space

Etiquetas Predichas

XGBOOST

Métricas en el conjunto de prueba:

	precision	recall	f1-score	support
alt.atheism	0.80	0.74	0.77	148
comp.graphics	0.75	0.78	0.76	199
comp.os.ms-windows.misc	0.72	0.74	0.73	195
comp.sys.ibm.pc.hardware	0.69	0.70	0.70	191
comp.sys.mac.hardware	0.83	0.81	0.82	183
comp.windows.x	0.81	0.81	0.81	195
misc.forsale	0.73	0.80	0.76	191

rec.autos	0.87	0.84	0.86	205
rec.motorcycles	0.93	0.89	0.91	222
rec.sport.baseball	0.91	0.91	0.91	209
rec.sport.hockey	0.95	0.93	0.94	193
sci.crypt	0.92	0.85	0.88	191
sci.electronics	0.70	0.75	0.72	221
sci.med	0.84	0.84	0.84	201
sci.space	0.86	0.84	0.85	184
soc.religion.christian	0.81	0.91	0.86	222
talk.politics.guns	0.74	0.83	0.78	158
talk.politics.mideast	0.94	0.91	0.93	194
talk.politics.misc	0.80	0.74	0.77	141
talk.religion.misc	0.72	0.53	0.61	123
accuracy			0.82	3766
macro avq	0.82	0.81	0.81	3766
weighted avg	0.82	0.82	0.82	3766

Matriz de Confusión 200 alt.atheism -110 1 0 0 comp.graphics - 1 156 145 17 comp.os.ms-windows.misc - 0 10 0 - 175 19 134 comp.sys.ibm.pc.hardware - 1 6 10 0 0 comp.sys.mac.hardware - 0 12 148 150 comp.windows.x - 0 12 0 0 157 1 misc.forsale - 0 4 0 Etiquetas Verdaderas - 125 rec.motorcycles - 2 0 197 1 2 5 rec.sport.baseball - 1 1 0 0 0 0 0 0 0 - 100 0 0 sci.crypt - 0 sci.electronics - 1 10 3 1 0 0 1 - 75 0 0 sci.space - 0 5 4 0 - 50 soc.religion.christian - 7 0 0 0 0 202 0 talk.politics.guns - 1 0 0 0 0 3 talk.politics.mideast - 1 - 25 talk.politics.misc - 2 0 talk.religion.misc - 10 0 0 0 0 0 21 11 - 0 alt.atheism comp.graphics sci.crypt sci.med soc.religion.christian sci.electronics sci.space talk.politics.guns talk.politics.mideast talk.politics.misc comp.os.ms-windows.misc comp.sys.ibm.pc.hardware comp.sys.mac.hardware comp.windows.x misc.forsale rec.sport.hockey talk.religion.misc rec.autos rec.motorcycles rec.sport.baseball

Etiquetas Predichas

TF-IDF

SVC

Métricas en el conjunto d	le prueba:			
	precision	recall	f1-score	support
alt.atheism	0.85	0.85	0.85	148
comp.graphics	0.74	0.85	0.79	199
comp.os.ms-windows.misc	0.82	0.80	0.81	195
comp.sys.ibm.pc.hardware	0.79	0.76	0.78	191
comp.sys.mac.hardware	0.89	0.88	0.88	183
comp.windows.x	0.85	0.89	0.87	195
misc.forsale	0.78	0.91	0.84	191
rec.autos	0.91	0.90	0.90	205
rec.motorcycles	0.97	0.96	0.97	222
rec.sport.baseball	0.96	0.92	0.94	209
rec.sport.hockey	0.98	0.95	0.97	193
sci.crypt	0.97	0.90	0.93	191
sci.electronics	0.83	0.84	0.83	221
sci.med	0.91	0.92	0.91	201
sci.space	0.97	0.92	0.95	184
soc.religion.christian	0.93	0.93	0.93	222
talk.politics.guns	0.90	0.94	0.92	158
talk.politics.mideast	0.96	0.95	0.96	194
talk.politics.misc	0.91	0.88	0.89	141
talk.religion.misc	0.88	0.76	0.82	123

accuracy 0.89
macro avg 0.89 0.89
weighted avg 0.89 0.89
0.89

3766 3766 3766

									Ма	triz	de	Con	fusi	ón									
	alt.atheism -	126	1	0	0	0	0	0	0	0	0	0	1	1	3	0	5	0	1	3	7		
	comp.graphics -	0	169	7	9	0	10	2	0	0	0	0	0	2	0	0	0	0	0	0	0		- 200
	comp.os.ms-windows.misc -	0	8	156	9	1	10	3	1	0	1	0	2	2	0	1	0	0	1	0	0		
	comp.sys.ibm.pc.hardware -	2	8	15	146	6	2	8	0	0	0	0	0	2	1	1	0	0	0	0	0		- 175
	comp.sys.mac.hardware -	0	5	2	7	161	0	3	0	0	0	0	0	5	0	0	0	0	0	0	0		
	comp.windows.x -	0	8	6	1	0	174	2	1	0	0	0	0	3	0	0	0	0	0	0	0		- 150
	misc.forsale -	0	0	0	2	3	0	173	2	2	0	0	0	6	1	0	0	1	0	1	0		150
as	rec.autos -	0	2	0	2	0	0	5	184	4	1	0	0	7	0	0	0	0	0	0	0		
ader	rec.motorcycles -	0	1	0	1	0	0	1	3	213	1	0	0	0	2	0	0	0	0	0	0		- 125
Etiquetas Verdaderas	rec.sport.baseball -	1	0	0	1	0	1	5	2	0	193	3	0	0	1	0	1	0	0	0	1		
as V	rec.sport.hockey -	0	3	0	0	0	0	2	0	0	1	183	0	2	1	0	0	0	0	1	0		- 100
luet	sci.crypt -	0	5	1	0	1	2	3	1	0	0	0	171	0	2	0	1	3	0	1	0		
ΕĔ	sci.electronics -	0	5	1	5	7	2	8	4	0	0	0	1	185	2	0	0	0	0	0	1		- 75
	sci.med -	2	3	1	0	0	0	1	1	0	1	0	0	4	184	2	0	0	1	0	1		- /5
	sci.space -	1	5	0	0	2	1	2	0	0	0	0	0	1	0	170	0	1	0	1	0		
	soc.religion.christian -	4	0	0	1	0	1	1	0	0	1	0	0	2	3	0	206	0	2	0	1		- 50
	talk.politics.guns -	0	1	0	0	0	0	0	1	0	2	0	2	0	0	0	0	148	0	4	0		
	talk.politics.mideast -	2	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2	185	1	1		- 25
	talk.politics.misc -	1	2	1	0	0	0	1	2	0	0	0	0	0	1	0	2	5	1	124	1		
	talk.religion.misc -	10	0	0	0	0	1	1	0	0	0	0	0	1	0	1	7	5	2	1	94		
		alt.atheism -	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale -	rec.autos -	rec.motorcycles -	rec.sport.baseball -	rec.sport.hockey -	sci.crypt -	sci.electronics -	sci.med -	sci.space -	soc.religion.christian -	talk.politics.guns -	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc -		- 0

Etiquetas Predichas

RF

Métricas en el conjunto d	le prueba:			
	precision	recall	f1-score	support
alt.atheism	0.77	0.72	0.74	148
comp.graphics	0.63	0.73	0.68	199
comp.os.ms-windows.misc	0.73	0.73	0.73	195
comp.sys.ibm.pc.hardware	0.70	0.70	0.70	191
comp.sys.mac.hardware	0.84	0.81	0.82	183
comp.windows.x	0.79	0.82	0.81	195
misc.forsale	0.65	0.84	0.73	191
rec.autos	0.81	0.79	0.80	205
rec.motorcycles	0.94	0.92	0.93	222
rec.sport.baseball	0.90	0.89	0.90	209
rec.sport.hockey	0.89	0.96	0.93	193
sci.crypt	0.88	0.87	0.88	191
sci.electronics	0.82	0.58	0.68	221
sci.med	0.84	0.81	0.83	201
sci.space	0.80	0.87	0.83	184
soc.religion.christian	0.72	0.93	0.81	222
talk.politics.guns	0.71	0.84	0.77	158

talk.politics.mideast	0.95	0.91	0.93	194
talk.politics.misc	0.85	0.65	0.73	141
talk.religion.misc	0.85	0.28	0.43	123
accuracy			0.80	3766
macro avg	0.80	0.78	0.78	3766
weighted avg	0.80	0.80	0.79	3766

Métricas en el conjunto de prueba:

Métricas en el conjunto o	le prueba:			
	precision	recall	f1-score	support
alt.atheism	0.76	0.74	0.75	148
comp.graphics	0.69	0.73	0.71	199
comp.os.ms-windows.misc	0.74	0.77	0.75	195
<pre>comp.sys.ibm.pc.hardware</pre>	0.73	0.69	0.71	191
comp.sys.mac.hardware	0.83	0.84	0.83	183
comp.windows.x	0.77	0.79	0.78	195
misc.forsale	0.71	0.83	0.77	191
rec.autos	0.79	0.80	0.80	205
rec.motorcycles	0.92	0.86	0.89	222
rec.sport.baseball	0.88	0.86	0.87	209
rec.sport.hockey	0.89	0.91	0.90	193
sci.crypt	0.91	0.83	0.87	191
sci.electronics	0.70	0.71	0.71	221
sci.med	0.83	0.81	0.82	201
sci.space	0.82	0.84	0.83	184
soc.religion.christian	0.82	0.87	0.85	222
talk.politics.guns	0.73	0.79	0.76	158
talk.politics.mideast	0.94	0.89	0.92	194
talk.politics.misc	0.72	0.70	0.71	141
talk.religion.misc	0.68	0.49	0.57	123
accuracy			0.80	3766
macro avg	0.79	0.79	0.79	3766
weighted avg	0.80	0.80	0.80	3766

									Ma	atriz	de	Con	fusi	ón									
	alt.atheism -	110	2	0	0	1	1	0	0	0	0	2	1	3	2	2	8	1	2	6	7		
	comp.graphics -	1	145	13	5	7	6	5	1	0	1	2	1	5	1	5	0	0	0	1	0		175
	comp.os.ms-windows.misc -	1	8	150	12	1	10	2	2	1	1	0	3	1	1	1	0	0	0	0	1		- 175
	comp.sys.ibm.pc.hardware -	1	8	15	132	5	5	10	0	0	1	0	1	10	1	2	0	0	0	0	0		
	comp.sys.mac.hardware -	0	7	2	8	153	1	6	0	0	1	0	0	3	0	0	0	1	1	0	0		- 150
	comp.windows.x -	0	16	11	1	1	154	2	2	0	0	0	1	3	2	1	1	0	0	0	0		
	misc.forsale -	0	2	0	5	4	1	159	4	1	3	1	3	2	2	2	0	0	0	0	2		
as	rec.autos -	0	2	0	0	2	1	6	164	7	3	1	0	9	4	1	0	2	2	1	0		- 125
ader	rec.motorcycles -	0	0	0	1	0	1	2	9	191	4	1	0	4	1	1	2	2	0	1	2		
Etiquetas Verdaderas	rec.sport.baseball -	2	0	0	2	0	0	1	1	1	180	13	0	4	2	0	2	0	0	1	0		- 100
as V	rec.sport.hockey -	0	0	0	0	1	1	2	0	0	7	176	0	0	2	2	0	0	0	2	0		
quet	sci.crypt -	0	3	1	2	2	6	1	0	0	0	0	159	4	2	0	0	7	0	2	2		
ΕĘ	sci.electronics -	1	3	4	13	4	4	10	7	1	0	1	4	158	2	5	1	2	0	1	0		- 75
	sci.med -	3	6	1	0	0	3	6	4	2	0	0	0	5	162	2	0	1	0	5	1		
	sci.space -	0	5	0	0	2	2	2	2	0	0	1	0	7	3	155	2	1	0	2	0		- 50
	soc.religion.christian -	8	1	1	0	0	1	2	0	0	1	0	0	3	1	2	194	0	1	0	7		50
	talk.politics.guns -	1	0	1	1	0	1	3	2	0	1	0	1	1	2	4	2	125	1	10	2		
	talk.politics.mideast -	2	0	0	0	1	1	2	0	3	1	0	0	3	0	0	0	3	173	4	1		- 25
	talk.politics.misc -	2	1	3	0	0	0	2	6	0	0	0	0	2	2	2	3	15	1		3		
	talk.religion.misc -	12	0	2	0	1	0	0	3	1	0	0	0	0	3	2	22	11	3	3	60		- 0
		alt.atheism -	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale -	rec.autos -	rec.motorcycles -	rec.sport.baseball -	a rec.sport.hockey -	sci.crypt -	sci.electronics -	sci.med -	sci.space -	soc.religion.christian -	talk.politics.guns -	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc -		- 0
										.ciqu	ctas	rieu	iciia	3									

word2vec-google-news-300

SVC

Métricas en el conjunto de prueba:

ricerrous on or companies a	e praesa.			
	precision	recall	f1-score	support
alt.atheism	0.60	0.68	0.64	148
comp.graphics	0.55	0.67	0.60	199
comp.os.ms-windows.misc	0.70	0.65	0.67	195
comp.sys.ibm.pc.hardware	0.57	0.57	0.57	191
comp.sys.mac.hardware	0.62	0.57	0.60	183
comp.windows.x	0.71	0.68	0.69	195
misc.forsale	0.57	0.82	0.67	191
rec.autos	0.85	0.83	0.84	205
rec.motorcycles	0.88	0.83	0.85	222
rec.sport.baseball	0.92	0.89	0.91	209
rec.sport.hockey	0.92	0.89	0.90	193
sci.crypt	0.82	0.82	0.82	191
sci.electronics	0.73	0.68	0.70	221
sci.med	0.87	0.81	0.84	201
sci.space	0.84	0.81	0.82	184

soc.religion.christian	0.82	0.81	0.81	222
talk.politics.guns	0.75	0.72	0.73	158
talk.politics.mideast	0.94	0.91	0.92	194
talk.politics.misc	0.67	0.71	0.69	141
talk.religion.misc	0.68	0.51	0.59	123
accuracy			0.75	3766
macro avg	0.75	0.74	0.74	3766
weighted avg	0.76	0.75	0.75	3766

								Ma	atriz	de	Con	fusi	ón										
alt.atheism -	101	2	0	0	0	0	1	0	0	0	2	1	0	5	0	15	1	3	8	9			
comp.graphics -	6	133	12	5	4	19	7	0	2	0	1	2	3	2	3	0	0	0	0	0			- 175
comp.os.ms-windows.misc -	0	19	126	11	6	17	6	2	0	1	0	1	1	0	2	0	2	0	1	0			
comp.sys.ibm.pc.hardware -	0	11	18	108	25	4	10	1	0	0	0	2	9	1	1	0	1	0	0	0			- 150
comp.sys.mac.hardware -	0	9	6	32	105	1	14	0	1	1	0	1	9	1	3	0	0	0	0	0			130
comp.windows.x -	0	28	13	5	5	132	5	0	0	2	0	1	3	0	1	0	0	0	0	0			
misc.forsale -	0	5	0	7	3	1	156	2	4	1	2	0	5	1	3	0	0	0	1	0			- 125
rec.autos -	1	0	1	0	2	1	8	170	5	0	0	0	10	1	2	0	2	0	2	0			
rec.motorcycles -	0	1	0	1	3	0	5	12	185	1	2	1	2	1	1	0	3	1	2	1			
rec.sport.baseball -	1	3	0	0	0	1	6	0	0	187	7	0	0	0	0	2	0	1	1	0			- 100
rec.sport.hockey -	1	1	0	0	0	0	10	0	1	6	171	0	0	0	2	0	0	0	1	0			
sci.crypt -	1	5	0	2	1	5	1	0	0	1	0	156	3	3	1	0	4	0	7	1			- 75
sci.electronics -	0	9	1	15	12	1	15	3	5	0	0	4	150	3	1	0	0	1	0	1			- /5
sci.med -	5	8	1	1	0	0	6	2	3	0	0	1	3	162	3	1	0	0	4	1			
sci.space -	3	4	1	1	2	2	4	2	1	1	0	1	5	2	149	0	4	0	2	0			- 50
soc.religion.christian -	19	1	0	1	0	0	6	0	0	1	0	1	0	1	0	179	0	2	0	11			
talk.politics.guns -	1	0	0	0	0	0	5	3	3	1	0	8	1	0	0	2	114	1	15	4			
talk.politics.mideast -	6	1	0	0	0	0	4	0	0	0	0	2	0	0	0	1	1	176	3	0			- 25
talk.politics.misc -	8	2	0	1	0	0	3	2	1	0	0	6	1	2	3	1	10	0	100	1			
talk.religion.misc -	14	0	0	0	0	1	3	1	0	0	0	2	0	1	3	18	11	3	3	63			- 0
	alt.atheism -	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale -	rec.autos	rec.motorcycles	rec.sport.baseball	rec.sport.hockey -	sci.crypt	sci.electronics	sci.med -	sci.space -	soc.religion.christian –	talk.politics.guns -	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc -			- 0
	comp.graphics - comp.os.ms-windows.misc - comp.sys.ibm.pc.hardware - comp.sys.mac.hardware - comp.windows.x - misc.forsale - rec.autos - rec.motorcycles - rec.sport.baseball - rec.sport.hockey - sci.crypt - sci.electronics - sci.med - sci.space - soc.religion.christian - talk.politics.guns - talk.politics.mideast - talk.politics.misc -	sci.med - 5 sci.space - 3 soc.religion.christian - 19 talk.politics.guns - 1 talk.politics.mideast - 6 talk.politics.misc - 8 talk.religion.misc - 14	comp.graphics - 6 133 comp.os.ms-windows.misc - 0 19 comp.sys.ibm.pc.hardware - 0 11 comp.sys.mac.hardware - 0 9 comp.windows.x - 0 28 misc.forsale - 0 5 rec.autos - 1 0 rec.motorcycles - 0 1 rec.sport.baseball - 1 3 rec.sport.hockey - 1 1 sci.crypt - 1 5 sci.electronics - 0 9 sci.med - 5 8 sci.space - 3 4 soc.religion.christian - 19 1 talk.politics.guns - 1 0 talk.politics.mideast - 6 1 talk.politics.misc - 8 2 talk.religion.misc - 14 0	comp.graphics - 6 133 12 comp.os.ms-windows.misc - 0 19 126 comp.sys.ibm.pc.hardware - 0 11 18 comp.sys.mac.hardware - 0 9 6 comp.windows.x - 0 28 13 misc.forsale - 0 5 0 rec.autos - 1 0 1 rec.motorcycles - 0 1 0 rec.sport.baseball - 1 3 0 rec.sport.hockey - 1 1 0 sci.crypt - 1 5 0 sci.med - 5 8 1 sci.med - 5 8 1 soc.religion.christian - 19 1 0 talk.politics.mideast - 6 1 0 talk.politics.misc - 8 2 0 talk.religion.misc - 14 0 0	comp.graphics - 6 133 12 5 comp.os.ms-windows.misc - 0 19 126 11 comp.sys.ibm.pc.hardware - 0 11 18 108 comp.sys.mac.hardware - 0 9 6 32 comp.windows.x - 0 28 13 5 misc.forsale - 0 5 0 7 rec.autos - 1 0 1 0 rec.motorcycles - 0 1 0 1 rec.sport.baseball - 1 3 0 0 rec.sport.hockey - 1 1 0 0 sci.crypt - 1 5 0 2 sci.ned - 5 8 1 1 sci.space - 3 4 1 1 soc.religion.christian - 19 1 0 1 talk.politics.mideast - 6 1 0 0 talk.politics.mideast - 6 1 0 0 talk.religion.misc - 14 0	comp.graphics - 6 133 12 5 4 comp.os.ms-windows.misc - 0 19 126 11 6 comp.sys.ibm.pc.hardware - 0 0 11 18 108 25 comp.sys.mac.hardware - 0 9 6 32 105 comp.windows.x - 0 28 13 5 5 misc.forsale - 0 5 0 7 3 rec.autos - 1 0 1 0 1 3 rec.motorcycles - 0 1 0 1 3 0 0 0 rec.sport.baseball - 1 3 0 1 1 0 0 0 0 0 0 0 0 0 <td>comp.graphics - 6 133 12 5 4 19 comp.os.ms-windows.misc - 0 19 126 11 6 17 comp.sys.ibm.pc.hardware - 0 11 18 108 25 4 comp.sys.mac.hardware - 0 9 6 32 105 1 comp.windows.x - 0 28 13 5 5 132 misc.forsale - 0 5 0 7 3 1 rec.autos - 1 0 1 0 2 1 rec.motorcycles - 0 1 0 1 3 0 rec.sport.baseball - 1 3 0 0 0 1 rec.sport.hockey - 1 1 0 0 0 0 sci.crypt - 1 5 0 2 1 5 sci.electronics - 0 9 1 15 12 1 sci.space - 3 4 1 1 2 2 <t< td=""><td>comp.graphics - 6 133 12 5 4 19 7 comp.os.ms-windows.misc - 0 19 126 11 6 17 6 comp.sys.ibm.pc.hardware - 0 11 18 108 25 4 10 comp.sys.mac.hardware - 0 9 6 32 105 1 14 comp.windows.x - 0 28 13 5 5 132 5 misc.forsale - 0 5 0 7 3 1 156 rec.autos - 1 0 1 0 2 1 8 rec.motorcycles - 0 1 0 1 3 0 0 1 6 rec.sport.baseball - 1 3 0 0 0 1 6 rec.sport.hockey - 1 1 0 0 0 0 1 1 sci.electronics - 0 9<</td><td> alt.atheism 101 2 0 0 0 0 1 0 0 comp.graphics 6 133 12 5 4 19 7 0 0 comp.os.ms-windows.misc 0 19 126 11 6 17 6 2 2 2 2 2 3 105 1 14 0 1 2 2 3 3 105 1 14 0 1 2 2 3 3 3 3 3 3 3 3</td><td>alt.atheism - 101 2 0 0 0 0 1 0 0 0 0 0</td><td>alt.atheism - 101 2 0 0 0 0 1 0 0 0 0 0</td><td>alt.atheism 101 2 0 0 0 0 1 0 0 0 2 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 2 0 1 2 2 2 2 3 1 2 2 2 3 3 2 2 3 3 3</td><td>alt.atheism - 101 2 0 0 0 0 1 0 0 0 2 1 comp.graphics - 6 133 12 5 4 19 7 0 2 0 1 2 2 2 2 2 2 3 10 1 2 2 3 3 2 2 3 4 10 1 0 0 0 1 2 2 2 3 3 3 3 3 3 3</td><td>comp.graphics - 6 133 12 5 4 19 7 0 2 0 1 2 3 comp.os.ms-windows.misc - 0 19 126 11 6 17 6 2 0 1 0 1 1 comp.sys.ibm.pc.hardware - 0 9 6 32 105 1 14 0 1 0 0 2 9 comp.sys.mac.hardware - 0 9 6 32 105 1 14 0 1 0 1 9 comp.windows.x - 0 28 13 5 5 132 5 0 0 1 9 comp.windows.x - 0 28 13 5 5 132 5 0 0 1 3 misc.forsale - 0 1 0 1 0 1 1 0 0 1 1 1 0</td><td> Alt.atheism 101 2 0 0 0 0 1 0 0 0 2 1 0 5 </td><td>alt.atheism comp.graphics - 6 133 12 5 4 19 7 0 2 0 1 0 5 0 0 0 0 0 0 0 0</td><td>alt.atheism comp.graphics - 6 133 12 5 4 19 7 0 2 0 1 2 3 2 3 0 0 0 0 0 0 0 0 0</td><td>alt.atheism - 101 2 0 0 0 0 1 0 0 0 2 1 0 5 0 15 1 1 1 1 1 1 1 1 </td><td>alt.atheism alt.atheism alt.atheism alt.atheism alt.atheism below a comp.graphics - 6 and comp.graphics - 7 an</td><td>Altatheism - 101</td><td>Altachteism - 101</td><td>alt.atheism</td><td>alt.atheism</td></t<></td>	comp.graphics - 6 133 12 5 4 19 comp.os.ms-windows.misc - 0 19 126 11 6 17 comp.sys.ibm.pc.hardware - 0 11 18 108 25 4 comp.sys.mac.hardware - 0 9 6 32 105 1 comp.windows.x - 0 28 13 5 5 132 misc.forsale - 0 5 0 7 3 1 rec.autos - 1 0 1 0 2 1 rec.motorcycles - 0 1 0 1 3 0 rec.sport.baseball - 1 3 0 0 0 1 rec.sport.hockey - 1 1 0 0 0 0 sci.crypt - 1 5 0 2 1 5 sci.electronics - 0 9 1 15 12 1 sci.space - 3 4 1 1 2 2 <t< td=""><td>comp.graphics - 6 133 12 5 4 19 7 comp.os.ms-windows.misc - 0 19 126 11 6 17 6 comp.sys.ibm.pc.hardware - 0 11 18 108 25 4 10 comp.sys.mac.hardware - 0 9 6 32 105 1 14 comp.windows.x - 0 28 13 5 5 132 5 misc.forsale - 0 5 0 7 3 1 156 rec.autos - 1 0 1 0 2 1 8 rec.motorcycles - 0 1 0 1 3 0 0 1 6 rec.sport.baseball - 1 3 0 0 0 1 6 rec.sport.hockey - 1 1 0 0 0 0 1 1 sci.electronics - 0 9<</td><td> alt.atheism 101 2 0 0 0 0 1 0 0 comp.graphics 6 133 12 5 4 19 7 0 0 comp.os.ms-windows.misc 0 19 126 11 6 17 6 2 2 2 2 2 3 105 1 14 0 1 2 2 3 3 105 1 14 0 1 2 2 3 3 3 3 3 3 3 3</td><td>alt.atheism - 101 2 0 0 0 0 1 0 0 0 0 0</td><td>alt.atheism - 101 2 0 0 0 0 1 0 0 0 0 0</td><td>alt.atheism 101 2 0 0 0 0 1 0 0 0 2 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 0 1 2 2 2 0 1 2 2 2 2 3 1 2 2 2 3 3 2 2 3 3 3</td><td>alt.atheism - 101 2 0 0 0 0 1 0 0 0 2 1 comp.graphics - 6 133 12 5 4 19 7 0 2 0 1 2 2 2 2 2 2 3 10 1 2 2 3 3 2 2 3 4 10 1 0 0 0 1 2 2 2 3 3 3 3 3 3 3</td><td>comp.graphics - 6 133 12 5 4 19 7 0 2 0 1 2 3 comp.os.ms-windows.misc - 0 19 126 11 6 17 6 2 0 1 0 1 1 comp.sys.ibm.pc.hardware - 0 9 6 32 105 1 14 0 1 0 0 2 9 comp.sys.mac.hardware - 0 9 6 32 105 1 14 0 1 0 1 9 comp.windows.x - 0 28 13 5 5 132 5 0 0 1 9 comp.windows.x - 0 28 13 5 5 132 5 0 0 1 3 misc.forsale - 0 1 0 1 0 1 1 0 0 1 1 1 0</td><td> Alt.atheism 101 2 0 0 0 0 1 0 0 0 2 1 0 5 </td><td>alt.atheism comp.graphics - 6 133 12 5 4 19 7 0 2 0 1 0 5 0 0 0 0 0 0 0 0</td><td>alt.atheism comp.graphics - 6 133 12 5 4 19 7 0 2 0 1 2 3 2 3 0 0 0 0 0 0 0 0 0</td><td>alt.atheism - 101 2 0 0 0 0 1 0 0 0 2 1 0 5 0 15 1 1 1 1 1 1 1 1 </td><td>alt.atheism alt.atheism alt.atheism alt.atheism alt.atheism below a comp.graphics - 6 and comp.graphics - 7 an</td><td>Altatheism - 101</td><td>Altachteism - 101</td><td>alt.atheism</td><td>alt.atheism</td></t<>	comp.graphics - 6 133 12 5 4 19 7 comp.os.ms-windows.misc - 0 19 126 11 6 17 6 comp.sys.ibm.pc.hardware - 0 11 18 108 25 4 10 comp.sys.mac.hardware - 0 9 6 32 105 1 14 comp.windows.x - 0 28 13 5 5 132 5 misc.forsale - 0 5 0 7 3 1 156 rec.autos - 1 0 1 0 2 1 8 rec.motorcycles - 0 1 0 1 3 0 0 1 6 rec.sport.baseball - 1 3 0 0 0 1 6 rec.sport.hockey - 1 1 0 0 0 0 1 1 sci.electronics - 0 9<	alt.atheism 101 2 0 0 0 0 1 0 0 comp.graphics 6 133 12 5 4 19 7 0 0 comp.os.ms-windows.misc 0 19 126 11 6 17 6 2 2 2 2 2 3 105 1 14 0 1 2 2 3 3 105 1 14 0 1 2 2 3 3 3 3 3 3 3 3	alt.atheism - 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6 and comp.graphics - 7 an	Altatheism - 101	Altachteism - 101	alt.atheism	alt.atheism

RF

XBOOST

Métricas en el conjunto de prueba:

	precision	recall	f1-score	support
alt.atheism	0.57	0.59	0.58	148
comp.graphics	0.64	0.73	0.68	199
comp.os.ms-windows.misc	0.67	0.62	0.64	195

Etiquetas Predichas

<pre>comp.sys.ibm.pc.hardware comp.sys.mac.hardware</pre>	0.62 0.63	0.58 0.59	0.60 0.61	191 183
comp.windows.x	0.66	0.70	0.68	195
misc.forsale	0.64	0.83	0.72	191
rec.autos	0.87	0.78	0.82	205
rec.motorcycles	0.75	0.79	0.77	222
rec.sport.baseball	0.87	0.83	0.85	209
rec.sport.hockey	0.85	0.91	0.88	193
sci.crypt	0.82	0.79	0.81	191
sci.electronics	0.74	0.65	0.69	221
sci.med	0.90	0.83	0.86	201
sci.space	0.85	0.78	0.81	184
soc.religion.christian	0.75	0.83	0.79	222
talk.politics.guns	0.66	0.78	0.72	158
talk.politics.mideast	0.83	0.84	0.84	194
talk.politics.misc	0.60	0.65	0.62	141
talk.religion.misc	0.59	0.33	0.42	123
accuracy			0.73	3766
macro avq	0.73	0.72	0.72	3766
weighted avg	0.73	0.73	0.73	3766

									Ma	atriz	de	Con	fusi	ón									
	alt.atheism -	88	1	0	0	0	0	1	1	1	1	2	2	0	3	3	20	3	7	6	9		
	comp.graphics -	5	145	9	8	4	15	7	0	0	3	0	1	1	1	0	0	0	0	0	0		- 175
	comp.os.ms-windows.misc -	0	9	120	14	9	25	9	0	0	0	0	2	1	0	3	0	1	0	1	1		
	comp.sys.ibm.pc.hardware -	0	10	14	110	19	10	12	3	2	0	0	1	8	1	0	0	1	0	0	0		- 150
	comp.sys.mac.hardware -	0	11	6	20	108	9	12	0	5	1	0	1	8	1	0	0	0	0	1	0		150
	comp.windows.x -	1	23	17	4	5	137	1	0	0	1	1	2	0	0	0	0	2	0	1	0		
	misc.forsale -	0	2	3	6	5	1	158	1	4	0	5	1	2	1	0	1	0	0	1	0		- 125
as	rec.autos -	1	2	0	0	0	1	6	160	14	0	0	1	10	1	2	0	5	1	1	0		
Etiquetas Verdaderas	rec.motorcycles -	0	1	0	0	1	0	6	14	176	3	2	1	4	1	4	1	2	1	5	0		
erd	rec.sport.baseball -	2	0	2	0	0	1	7	0	4	173	12	1	0	0	0	1	0	2	3	1		- 100
as V	rec.sport.hockey -	1	1	0	0	0	0	4	0	3	5	175	0	0	0	0	2	0	1	1	0		
quet	sci.crypt -	3	3	3	1	2	4	0	0	1	1	1	151	4	1	0	0	6	3	6	1		- 75
Ēţi	sci.electronics -	0	6	2	13	14	4	18	1	5	2	0	6	143	1	4	0	0	0	1	1		,,,
	sci.med -	6	2	0	0	0	1	0	2	3	0	2	1	4	167	4	0	3	1	3	2		
	sci.space -	0	5	0	0	3	0	4	1	6	1	3	0	4	2	143	1	4	1	5	1		- 50
	soc.religion.christian -	14	1	0	0	1	0	0	0	1	2	1	0	0	2	0	185	1	6	1	7		
	talk.politics.guns -	3	1	0	0	0	0	0	0	5	2	1	4	1	2	0	1	124	2	10	2		
	talk.politics.mideast -	2	3	0	0	0	0	0	0	2	1	0	4	0	0	0	2	5	163	10	2		- 25
	talk.politics.misc -	13	1	2	0	0	0	0	0	1	2	0	5	1	1	3	1	13	5		2		
	talk.religion.misc -	16	0	0	0	0	1	1	1	2	1	0	0	1	1	2	31	17	3	5	41		- 0
		alt.atheism -	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale -	rec.autos -	rec.motorcycles -	rec.sport.baseball -	rec.sport.hockey -	sci.crypt -	sci.electronics -	sci.med -	sci.space -	soc.religion.christian –	talk.politics.guns -	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc -		0
									E	tiqu	etas	Pred	licha	S									

Word2-to-vect Entrenado 100

SVC

Métricas en el conjunto de prueba:

precision recall f1-score support

alt.atheism 0.43 0.54 0.48 148

comp graphics 0.46 0.54 0.50 199

alt.atheism	0.43	0.54	0.48	148
comp.graphics	0.46	0.54	0.50	199
comp.os.ms-windows.misc	0.68	0.64	0.66	195
<pre>comp.sys.ibm.pc.hardware</pre>	0.56	0.51	0.53	191
comp.sys.mac.hardware	0.53	0.52	0.53	183
comp.windows.x	0.71	0.73	0.72	195
misc.forsale	0.68	0.79	0.73	191
rec.autos	0.58	0.56	0.57	205
rec.motorcycles	0.64	0.65	0.65	222
rec.sport.baseball	0.70	0.70	0.70	209
rec.sport.hockey	0.78	0.73	0.75	193
sci.crypt	0.81	0.73	0.77	191
sci.electronics	0.52	0.48	0.50	221
sci.med	0.58	0.61	0.59	201
sci.space	0.71	0.66	0.68	184
soc.religion.christian	0.65	0.79	0.72	222

talk.politics.guns	0.52	0.65	0.58	158
talk.politics.mideast	0.79	0.76	0.78	194
talk.politics.misc	0.48	0.44	0.46	141
talk.religion.misc	0.44	0.11	0.18	123
accuracy			0.62	3766
macro avg	0.61	0.61	0.60	3766
weighted avg	0.62	0.62	0.62	3766

Matriz de Confusión alt.atheism - 80 0 0 0 0 0 0 comp.graphics - 4 18 10 21 160 comp.os.ms-windows.misc - 1 22 125 comp.sys.ibm.pc.hardware - 0 17 12 31 4 0 0 13 0 0 140 comp.sys.mac.hardware - 0 9 6 3 12 8 1 0 0 0 14 0 0 0 0 150 120 2 6 misc.forsale - 2 8 rec.autos - 0 3 1 114 28 2 14 0 Etiquetas Verdaderas rec.motorcycles - 0 100 3 146 rec.sport.baseball - 5 0 34 2 rec.sport.hockey - 1 0 3 0 39 0 0 0 - 80 10 sci.electronics - 0 12 13 9 60 sci.space - 4 soc.religion.christian - 21 0 0 talk.politics.guns - 3 talk.politics.mideast - 11 1 0 0 0 0 - 20 talk.politics.misc - 13 2 0 0 0 0 8 talk.religion.misc - 29 0 - 0 sci.crypt comp.graphics soc.religion.christian misc.forsale rec.sport.baseball rec.sport.hockey comp.windows.x sci.electronics comp.sys.ibm.pc.hardware talk.politics.misc talk.religion.misc comp.sys.mac.hardware talk.politics.guns talk.politics.mideast comp.os.ms-windows.misc rec.autos rec.motorcycles sci.med

Random Forest

Métricas en el conjunto de prueba:

	precision	recall	f1-score	support
alt.atheism	0.45	0.53	0.48	148
comp.graphics	0.45	0.45	0.45	199
comp.os.ms-windows.misc	0.60	0.56	0.58	195
comp.sys.ibm.pc.hardware	0.56	0.43	0.49	191
comp.sys.mac.hardware	0.44	0.45	0.45	183
comp.windows.x	0.64	0.68	0.66	195

Etiquetas Predichas

misc.forsale	0.58	0.74	0.65	191
rec.autos	0.51	0.49	0.50	205
				222
rec.motorcycles	0.53	0.63	0.57	
rec.sport.baseball	0.62	0.67	0.64	209
rec.sport.hockey	0.74	0.68	0.71	193
sci.crypt	0.75	0.69	0.72	191
sci.electronics	0.46	0.38	0.42	221
sci.med	0.55	0.59	0.57	201
sci.space	0.56	0.65	0.60	184
soc.religion.christian	0.66	0.72	0.69	222
talk.politics.guns	0.51	0.61	0.55	158
talk.politics.mideast	0.73	0.73	0.73	194
talk.politics.misc	0.51	0.38	0.44	141
talk.religion.misc	0.50	0.14	0.22	123
accuracy			0.57	3766
macro avq	0.57	0.56	0.56	3766
3				
weighted avg	0.57	0.57	0.56	3766

Matriz de Confusión alt.atheism - 78 0 0 0 0 0 0 comp.graphics - 1 26 8 9 28 comp.os.ms-windows.misc - 2 16 110 11 - 140 comp.sys.ibm.pc.hardware - 0 10 16 40 3 10 comp.sys.mac.hardware - 0 30 5 14 - 120 comp.windows.x - 0 31 misc.forsale - 2 3 14 101 rec.autos - 0 0 36 - 100 Etiquetas Verdaderas rec.motorcycles - 2 35 10 139 rec.sport.baseball - 2 3 39 - 80 rec.sport.hockey - 0 0 0 3 51 132 sci.crypt - 2 0 3 2 1 0 60 119 sci.med - 9 2 22 6 sci.space - 0 0 0 9 1 3 11 120 0 3 40 soc.religion.christian - 21 talk.politics.guns - 2 3 0 11 13 talk.politics.mideast - 10 0 15 141 0 0 0 0 0 5 1 0 - 20 talk.politics.misc - 15 0 0 30 0 6 talk.religion.misc - 27 - 0 comp.graphics comp.sys.ibm.pc.hardware comp.sys.mac.hardware rec.sport.hockey sci.crypt sci.electronics sci.med sci.space soc.religion.christian talk.politics.misc comp.windows.x talk.politics.guns talk.politics.mideast alt.atheism comp.os.ms-windows.misc rec.motorcycles talk.religion.misc misc.forsale rec.autos rec.sport.baseball

Etiquetas Predichas

XGBOOTS

Métricas en el conjunto d	le prueba:			
	precision	recall	f1-score	support
alt.atheism	0.44	0.49	0.46	148
comp.graphics	0.47	0.50	0.49	199
comp.os.ms-windows.misc	0.62	0.58	0.60	195
comp.sys.ibm.pc.hardware	0.48	0.44	0.46	191
comp.sys.mac.hardware	0.38	0.37	0.37	183
comp.windows.x	0.66	0.66	0.66	195
misc.forsale	0.62	0.75	0.68	191
rec.autos	0.56	0.52	0.54	205
rec.motorcycles	0.52	0.60	0.56	222
rec.sport.baseball	0.62	0.57	0.60	209
rec.sport.hockey	0.69	0.70	0.69	193
sci.crypt	0.78	0.71	0.74	191
sci.electronics	0.44	0.41	0.43	221
sci.med	0.51	0.57	0.54	201
sci.space	0.65	0.64	0.65	184
soc.religion.christian	0.65	0.75	0.69	222
talk.politics.guns	0.54	0.59	0.56	158
talk.politics.mideast	0.78	0.72	0.75	194
talk.politics.misc	0.39	0.38	0.38	141
talk.religion.misc	0.31	0.15	0.21	123

macro avg 0.56 0.56 0.55 3766 weighted avg 0.56 0.57 0.56 3766

0.57 3766

Micro-F1 Score: 0.5666

accuracy

									Ма	triz	de	Con	fusi	ón									
	alt.atheism -	72	0	0	0	0	0	0	0	5	2	0	2	0	5	3	33	1	4	11	10		- 160
	comp.graphics -	2	100	21	9	10	22	4	2	3	0	0	0	12	6	6	2	0	0	0	0		
	comp.os.ms-windows.misc -	2	20	113	13	6	17	6	2	0	0	1	3	8	2	1	0	1	0	0	0		
	comp.sys.ibm.pc.hardware -	0	15	14	84	39	2	15	5	6	0	0	1	9	1	0	0	0	0	0	0		- 140
	comp.sys.mac.hardware -	0	6	7	46	67	5	18	8	3	0	0	2	20	0	1	0	0	0	0	0		
	comp.windows.x -	1	28	17	0	4	129	1	0	0	1	0	2	7	1	4	0	0	0	0	0		- 120
	misc.forsale -	2	4	1	6	8	3	143	1	10	0	3	0	5	1	2	0	0	0	1	1		
as	rec.autos -	0	4	0	0	4	1	11	106	38	0	0	0	12	15	2	0	6	3	3	0		- 100
adeı	rec.motorcycles -	1	4	0	0	2	0	4	34	134	9	2	0	12	6	4	1	2	1	4	2		100
Etiquetas Verdaderas	rec.sport.baseball -	3	5	0	0	0	0	5	2	7	120	53	0	3	4	4	0	0	1	2	0		
as/	rec.sport.hockey -	0	1	0	1	1	0	3	1	2	45	135	0	0	1	2	0	0	0	1	0		- 80
anet	sci.crypt -	2	5	2	1	4	3	0	1	1	0	0	136	7	10	0	1	9	0	7	2		
Ē	sci.electronics -	0	10	4	15	26	7	15	14	14	1	0	6	91	8	5	1	2	1	1	0		- 60
	sci.med -	9	2	1	0	3	3	1	2	10	4	1	4	7	115	16	5	3	0	11	4		
	sci.space -	2	5	1	1	2	1	1	2	7	3	0	3	11	19	118	2	2	2	2	0		
	soc.religion.christian -	19	1	0	0	0	0	0	1	1	2	0	0	1	8	1	166	3	8	1	10		- 40
	talk.politics.guns -	2	1	0	0	0	0	0	4	2	3	1	6	0	9	1	2	94	10	22	1		
	talk.politics.mideast -	6	0	0	0	1	1	1	1	3	1	0	2	0	4	1	7	12	139	12	3		- 20
	talk.politics.misc -	15	1	0	0	0	1	0	2	2	2	1	7	0	3	8	5	27	5	53	9		
	talk.religion.misc -	25	0	1	0	0	1	1	0	8	1	0	1	0	9	2	31	13	5	6	19		- 0
		alt.atheism -	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale	rec.autos	rec.motorcycles	rec.sport.baseball	rec.sport.hockey	sci.crypt -	sci.electronics -	sci.med -	sci.space -	soc.religion.christian -	talk.politics.guns -	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc		
									ь	uqu	etas	Pred	пспа	5									

W2C-300

SVC

Métricas en el conjunto de prueba:

	precision	recall	f1-score	support
	0.10	0 50	0 4 4	1.10
alt.atheism	0.40	0.50	0.44	148
comp.graphics	0.47	0.51	0.49	199
comp.os.ms-windows.misc	0.63	0.62	0.62	195
comp.sys.ibm.pc.hardware	0.55	0.49	0.52	191
comp.sys.mac.hardware	0.50	0.50	0.50	183
comp.windows.x	0.71	0.73	0.72	195
misc.forsale	0.67	0.79	0.72	191
rec.autos	0.60	0.58	0.59	205
rec.motorcycles	0.60	0.64	0.62	222
rec.sport.baseball	0.66	0.66	0.66	209
rec.sport.hockey	0.73	0.70	0.71	193
sci.crypt	0.83	0.73	0.78	191
sci.electronics	0.52	0.49	0.51	221
sci.med	0.55	0.58	0.56	201
sci.space	0.69	0.65	0.67	184

soc.religion.christian	0.61	0.78	0.69	222
talk.politics.guns	0.51	0.66	0.58	158
talk.politics.mideast	0.76	0.71	0.74	194
talk.politics.misc	0.48	0.41	0.44	141
talk.religion.misc	0.35	0.06	0.10	123
accuracy			0.60	3766
macro avg	0.59	0.59	0.58	3766
weighted avg	0.60	0.60	0.60	3766

soc.religion.christian - 20

talk.politics.guns - 3

talk.politics.mideast - 14 0

talk.politics.misc - 17 0 talk.religion.misc - 28

> alt.atheism comp.graphics

comp.sys.ibm.pc.hardware comp.sys.mac.hardware

comp.os.ms-windows.misc

comp.windows.x -

misc.forsale rec.autos rec.motorcycles

Matriz de Confusión alt.atheism - 74 0 18 10 comp.graphics - 2 23 120 comp.os.ms-windows.misc - 2 14 15 comp.sys.ibm.pc.hardware - 0 comp.sys.mac.hardware - 0 comp.windows.x - 0 24 17 misc.forsale - 2 Etiquetas Verdaderas rec.motorcycles - 2 rec.sport.baseball - 5 rec.sport.hockey - 1 sci.crypt - 3 sci.electronics - 0 0 11

- 120

- 100

- 20

- 0

Etiquetas Predichas

0 174

sci.med

sci.space

soc.religion.christian talk.politics.guns talk.politics.mideast talk.politics.misc talk.religion.misc

sci.electronics

sci.crypt -

rec.sport.hockey

rec.sport.baseball

RF

Métricas en el conjunto d	le prueba:			
-	precision	recall	f1-score	support
alt.atheism	0.42	0.51	0.46	148
comp.graphics	0.44	0.48	0.46	199
comp.os.ms-windows.misc	0.58	0.55	0.57	195
<pre>comp.sys.ibm.pc.hardware</pre>	0.51	0.40	0.45	191
comp.sys.mac.hardware	0.42	0.42	0.42	183
comp.windows.x	0.66	0.68	0.67	195
misc.forsale	0.58	0.74	0.65	191
rec.autos	0.52	0.49	0.51	205
rec.motorcycles	0.54	0.61	0.57	222
rec.sport.baseball	0.58	0.64	0.61	209
rec.sport.hockey	0.72	0.68	0.70	193
sci.crypt	0.77	0.68	0.72	191
sci.electronics	0.51	0.43	0.47	221
sci.med	0.51	0.57	0.54	201
sci.space	0.57	0.60	0.59	184
soc.religion.christian	0.67	0.71	0.69	222
talk.politics.guns	0.48	0.61	0.54	158
talk.politics.mideast	0.71	0.74	0.72	194
talk.politics.misc	0.42	0.33	0.37	141
talk.religion.misc	0.47	0.12	0.19	123
accuracy			0.56	3766
macro avg	0.55	0.55	0.54	3766
weighted avg	0.56	0.56	0.56	3766

									Ma	triz	de	Con	fusi	ón									
	alt.atheism -	76	0	0	0	0	0	0	0	4	3	1	2	0	9	0	29	7	6	7	4		
	comp.graphics -	1	95	25	5	15	25	4	0	3	1	0	0	8	10	5	2	0	0	0	0		
	comp.os.ms-windows.misc -	1	19	107	13	8	21	8	0	1	1	1	3	7	1	3	0	0	0	0	1		- 140
	comp.sys.ibm.pc.hardware -	0	12	18		46	4	16	5	2	1	0	0	9	1	1	0	0	0	0	0		
	comp.sys.mac.hardware -	0	7	9	32	77	4	17	15	4	0	1	1	15	0	1	0	0	0	0	0		- 120
	comp.windows.x -	1	33	15	1	1	133	3	0	0	0	0	2	1	2	3	0	0	0	0	0		
	misc.forsale -	0	5	1	9	4	2	142	2	5	5	0	0	4	3	6	1	0	1	1	0		
as	rec.autos -	1	4	0	1	4	1	12	100	35	4	0	1	17	9	5	0	6	1	4	0	-	- 100
ade	rec.motorcycles -	0	2	0	2	2	0	5	32	136	9	1	0	7	7	8	1	3	0	5	2		
Etiquetas Verdaderas	rec.sport.baseball -	4	1	0	1	1	0	8	3	6	133	44	0	2	1	1	0	0	2	1	1		- 80
as \	rec.sport.hockey -	1	1	0	0	0	0	1	0	4	51	131	0	0	0	3	0	0	0	1	0		00
anet	. sci.crypt -	3	5	1	0	3	4	0	1	1	1	1	129	10	11	1	0	11	0	9	0		
Εţ	sci.electronics -	1	11	6	9	21	3	19	19	12	0	0	7	96	5	11	0	1	0	0	0		- 60
	sci.med -	9	5	0	0	1	3	1	4	12	4	0	3	5	114	22	1	9	0	6	2		
	sci.space -	3	10	0	0	0	0	2	8	11	6	1	2	7	14	111	1	3	1	4	0		- 40
	soc.religion.christian -	25	2	0	0	0	0	1	1	1	3	0	0	0	11	1	158	2	10	1	6		40
	talk.politics.guns -	4	0	0	0	0	0	1	1	3	2	1	9	0	9	4	4	97	12	11	0		
	talk.politics.mideast -	8	1	0	0	0	0	1	0	3	1	0	1	0	6	0	6	14	143	10	0		- 20
	talk.politics.misc -	14	1	0	0	0	0	1	0	6	2	0	8	1	4	6	6	32	13	46	1		
	talk.religion.misc -	31	0	1	0	0	1	1	0	4	2	0	0	0	6	3	28	15	12	4	15		
		alt.atheism -	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale -	rec.autos -	rec.motorcycles -	rec.sport.baseball -	rec.sport.hockey -	sci.crypt -	sci.electronics -	sci.med -	sci.space -	soc.religion.christian –	talk.politics.guns –	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc -		- 0
									Е	tiqu	etas	Pred	licha	S									

glove-wiki-gigaword-100

SVC

Métricas en el conjunto d	le prueba:			
	precision	recall	f1-score	support
alt.atheism	0.60	0.68	0.64	148
comp.graphics	0.55	0.67	0.60	199
comp.os.ms-windows.misc	0.70	0.65	0.67	195
comp.sys.ibm.pc.hardware	0.57	0.57	0.57	191
comp.sys.mac.hardware	0.62	0.57	0.60	183
comp.windows.x	0.71	0.68	0.69	195
misc.forsale	0.57	0.82	0.67	191
rec.autos	0.85	0.83	0.84	205
rec.motorcycles	0.88	0.83	0.85	222
rec.sport.baseball	0.92	0.89	0.91	209
rec.sport.hockey	0.92	0.89	0.90	193
sci.crypt	0.82	0.82	0.82	191
sci.electronics	0.73	0.68	0.70	221
sci.med	0.87	0.81	0.84	201

sci.space soc.religion.christian talk.politics.guns talk.politics.mideast talk.politics.misc talk.religion.misc	0.84 0.82 0.75 0.94 0.67	0.81 0.81 0.72 0.91 0.71 0.51	0.82 0.81 0.73 0.92 0.69 0.59	184 222 158 194 141 123
accuracy macro avg weighted avg	0.75 0.76	0.74 0.75	0.75 0.74 0.75	3766 3766 3766

Matriz de Confusión alt.atheism - 101 2 0 0 0 0 1 0 0 0 2 1 0 5 0 15 comp.graphics - 6 133 comp.os.ms-windows.misc - 0 19 126 11 comp.sys.ibm.pc.hardware - 0 11 18 108 25 - 150 32 105 comp.sys.mac.hardware - 0 comp.windows.x - 0 28 13 - 125 rec.autos - 1 Etiquetas Verdaderas rec.motorcycles - 0 - 100 rec.sport.baseball - 1 rec.sport.hockey - 1 sci.crypt - 1 - 75 sci.med - 5 sci.space - 3 - 50 soc.religion.christian - 19 talk.politics.guns - 1 - 25 talk.politics.mideast - 6 talk.politics.misc - 8 talk.religion.misc - 14 - 0 comp.os.ms-windows.misc comp.sys.ibm.pc.hardware comp.sys.mac.hardware misc.forsale rec.autos rec.sport.hockey sci.crypt soc.religion.christian talk.politics.mideast talk.politics.misc alt.atheism comp.graphics comp.windows.x rec.motorcycles sci.electronics talk.politics.guns talk.religion.misc rec.sport.baseball

RF

Metricas en el conjunto (de prueba: precision	recall	f1-score	support
alt.atheism comp.graphics		0.56 0.61	0.53 0.58	148 199

Etiquetas Predichas

 comp.os.ms-windows.misc
 0.59
 0.56
 0.58
 195

 comp.sys.ibm.pc.hardware
 0.55
 0.51
 0.53
 191

comp.sys.mac.hardware	0.56	0.50	0.53	183
comp.windows.x	0.56	0.58	0.57	195
misc.forsale	0.62	0.70	0.66	191
rec.autos	0.74	0.73	0.73	205
rec.motorcycles	0.68	0.75	0.71	222
rec.sport.baseball	0.80	0.87	0.83	209
rec.sport.hockey	0.88	0.87	0.88	193
sci.crypt	0.71	0.70	0.71	191
sci.electronics	0.69	0.51	0.58	221
sci.med	0.79	0.81	0.80	201
sci.space	0.71	0.74	0.73	184
soc.religion.christian	0.72	0.83	0.77	222
talk.politics.guns	0.61	0.73	0.66	158
talk.politics.mideast	0.85	0.84	0.84	194
talk.politics.misc	0.56	0.61	0.59	141
talk.religion.misc	0.66	0.17	0.27	123
accuracy			0.67	3766
macro avg	0.67	0.66	0.65	3766
weighted avg	0.67	0.67	0.67	3766

Matriz de Confusión alt.atheism - 83 0 0 0 0 0 1 comp.graphics - 6 121 15 4 5 19 0 14 110 12 comp.os.ms-windows.misc - 1 10 17 97 26 comp.sys.ibm.pc.hardware - 0 12 - 150 comp.sys.mac.hardware - 0 4 11 28 8 14 1 0 comp.windows.x - 0 134 misc.forsale - 0 14 4 2 4 rec.autos - 0 1 2 1 5 150 14 0 3 11 0 3 0 Etiquetas Verdaderas rec.motorcycles - 1 - 100 rec.sport.baseball - 3 11 rec.sport.hockey - 1 0 sci.crypt - 5 0 10 - 75 sci.electronics - 1 15 13 sci.med - 5 162 sci.space - 4 0 - 50 soc.religion.christian - 15 talk.politics.guns - 4 talk.politics.mideast - 8 5 - 25 0 0 2 0 0 0 0 0 0 talk.politics.misc - 7 0 0 2 2 6 0 3 1 21 5 0 1 0 1 talk.religion.misc - 22 - 0 sci.crypt soc.religion.christian talk.politics.mideast comp.graphics comp.sys.mac.hardware sci.electronics comp.windows.x talk.politics.guns comp.sys.ibm.pc.hardware talk.religion.misc alt.atheism rec.sport.baseball talk.politics.misc comp.os.ms-windows.misc misc.forsale rec.autos rec.motorcycles rec.sport.hockey sci.med

Etiquetas Predichas

XBOOT

Métricas en el conjunto d	e prueba:			
	precision	recall	f1-score	support
alt.atheism	0.53	0.57	0.55	148
comp.graphics	0.54	0.58	0.56	199
comp.os.ms-windows.misc	0.58	0.55	0.57	195
comp.sys.ibm.pc.hardware	0.53	0.49	0.51	191
comp.sys.mac.hardware	0.54	0.55	0.54	183
comp.windows.x	0.58	0.62	0.60	195
misc.forsale	0.62	0.73	0.67	191
rec.autos	0.77	0.72	0.74	205
rec.motorcycles	0.76	0.75	0.76	222
rec.sport.baseball	0.83	0.88	0.86	209
rec.sport.hockey	0.89	0.84	0.86	193
sci.crypt	0.77	0.78	0.78	191
sci.electronics	0.63	0.57	0.60	221
sci.med	0.84	0.80	0.82	201
sci.space	0.75	0.77	0.76	184
soc.religion.christian	0.74	0.81	0.77	222
talk.politics.guns	0.62	0.70	0.66	158
talk.politics.mideast	0.87	0.85	0.86	194
talk.politics.misc	0.58	0.61	0.59	141
talk.religion.misc	0.57	0.30	0.39	123
accuracy			0.68	3766
macro avq	0.68	0.67	0.67	3766
weighted avg	0.69	0.68	0.68	3766

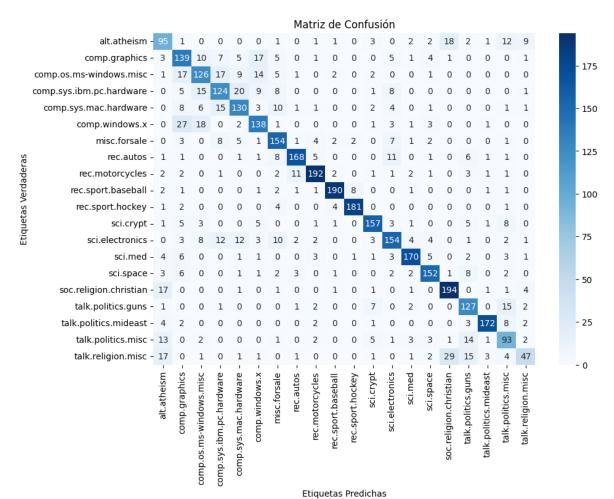
									Ma	triz	de	Con	fusi	ón									
	alt.atheism -	85	0	1	0	0	1	1	0	1	1	2	3	0	5	4	23	2	6	9	4		175
	comp.graphics -	4	115	19	6	4	28	6	0	0	1	0	2	6	1	5	0	0	0	1	1		- 175
	comp.os.ms-windows.misc -	0	11	108	13	11	26	8	2	1	2	0	4	4	0	1	0	0	0	1	3		
	comp.sys.ibm.pc.hardware -	0	12	18	93	32	6	12	2	1	0	0	3	10	0	1	0	1	0	0	0		- 150
	comp.sys.mac.hardware -	0	9	9	28	100	4	14	1	3	1	0	3	7	0	3	0	1	0	0	0		
	comp.windows.x -	0	28	17	4	4	121	2	0	2	2	1	2	3	3	4	1	1	0	0	0		
	misc.forsale -	0	5	2	10	3	4	140	2	4	2	2	2	8	0	4	0	2	0	1	0		- 125
as	rec.autos -	0	0	0	4	2	1	7	148	13	0	1	1	15	1	1	0	8	2	1	0		
Etiquetas Verdaderas	rec.motorcycles -	3	1	2	0	1	0	10	21	167	1	2	1	3	1	1	0	3	0	5	0		
erd/	rec.sport.baseball -	3	1	0	1	1	2	3	1	1	184	9	0	0	0	1	0	0	0	1	1		- 100
as V	rec.sport.hockey -	2	1	0	0	1	1	2	0	2	19	162	0	2	0	0	0	0	0	1	0		
quet	sci.crypt -	1	5	2	0	1	6	2	0	0	0	0	149	6	1	0	0	7	1	9	1		- 75
ΕĔ	sci.electronics -	0	9	3	15	21	5	15	5	4	1	1	5	127	3	5	0	1	0	0	1		,,,
	sci.med -	6	4	3	0	1	1	1	1	2	1	0	2	4	160	6	3	1	0	3	2		
	sci.space -	3	5	0	1	1	1	0	3	4	3	1	0	5	4	141	0	2	1	8	1		- 50
	soc.religion.christian -	17	2	0	0	0	0	0	0	0	1	0	1	1	3	3	180	0	5	2	7		
	talk.politics.guns -	5	0	0	0	0	0	0	2	6	1	0	5	0	4	1	1	111	7	12	3		
	talk.politics.mideast -	6	4	0	1	2	0	0	1	2	1	1	3	0	0	0	2	2	165	3	1		- 25
	talk.politics.misc -	10	1	1	0	0	0	1	3	4	0	0	5	0	2	6	1	17	1	86	3		
	talk.religion.misc -	16	0	1	0	0	0	1	1	2	0	0	2	0	2	2	33	19	1	6	37		- 0
		alt.atheism -	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale -	rec.autos	rec.motorcycles -	rec.sport.baseball -	a rec.sport.hockey -	sci.crypt -	sci.electronics -	sci.med -	sci.space -	soc.religion.christian -	talk.politics.guns -	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc -		- 0
										aqu	ctas	rieu	iciia	3									

glove-wiki-gigaword-300

SVC

Métricas en el conjunto d	le prueba:			
	precision	recall	f1-score	support
alt.atheism	0.58	0.64	0.61	148
comp.graphics	0.61	0.70	0.65	199
comp.os.ms-windows.misc	0.67	0.65	0.66	195
comp.sys.ibm.pc.hardware	0.67	0.65	0.66	191
comp.sys.mac.hardware	0.69	0.71	0.70	183
comp.windows.x	0.71	0.71	0.71	195
misc.forsale	0.72	0.81	0.76	191
rec.autos	0.88	0.82	0.85	205
rec.motorcycles	0.88	0.86	0.87	222
rec.sport.baseball	0.93	0.91	0.92	209
rec.sport.hockey	0.94	0.94	0.94	193
sci.crypt	0.84	0.82	0.83	191
sci.electronics	0.76	0.70	0.73	221
sci.med	0.89	0.85	0.87	201

sci.space	0.84	0.83	0.83	184
soc.religion.christian	0.80	0.87	0.83	222
talk.politics.guns	0.68	0.80	0.74	158
talk.politics.mideast	0.94	0.89	0.91	194
talk.politics.misc	0.60	0.66	0.63	141
talk.religion.misc	0.66	0.38	0.48	123
accuracy			0.77	3766
macro avg	0.76	0.76	0.76	3766
weighted avg	0.77	0.77	0.77	3766



RF

Métricas	en	el	conjunto	de	prueba:

	precision	recall	f1-score	support
alt.atheism	0.52	0.59	0.55	148
comp.graphics	0.62	0.61	0.61	199

comp.os.ms-windows.misc	0.64	0.64	0.64	195
<pre>comp.sys.ibm.pc.hardware</pre>	0.59	0.57	0.58	191
comp.sys.mac.hardware	0.68	0.56	0.61	183
comp.windows.x	0.66	0.68	0.67	195
misc.forsale	0.65	0.76	0.70	191
rec.autos	0.81	0.77	0.79	205
rec.motorcycles	0.72	0.82	0.77	222
rec.sport.baseball	0.85	0.90	0.88	209
rec.sport.hockey	0.89	0.91	0.90	193
sci.crypt	0.73	0.75	0.74	191
sci.electronics	0.71	0.59	0.64	221
sci.med	0.83	0.84	0.83	201
sci.space	0.77	0.78	0.77	184
soc.religion.christian	0.73	0.85	0.79	222
talk.politics.guns	0.61	0.80	0.69	158
talk.politics.mideast	0.87	0.84	0.85	194
talk.politics.misc	0.67	0.63	0.65	141
talk.religion.misc	0.80	0.20	0.31	123
accuracy			0.72	3766
macro avg	0.72	0.70	0.70	3766
weighted avg	0.72	0.72	0.71	3766

									Ma	atriz	de	Con	fusi	ón									
	alt.atheism -	87	0	0	0	0	0	0	1	8	1	1	2	0	6	2	21	2	3	12	2		
	comp.graphics -	4	122	19	9	4	14	5	0	2	3	2	2	4	1	8	0	0	0	0	0		- 175
	comp.os.ms-windows.misc -	1	9	124	13	2	25	7	0	2	1	0	4	4	0	1	0	0	0	2	0		
	comp.sys.ibm.pc.hardware -	0	9	15	108	20	6	15	3	3	0	0	3	8	0	0	0	1	0	0	0		
	comp.sys.mac.hardware -	0	6	5	25	102	9	12	1	4	2	0	4	8	2	2	0	0	0	1	0		- 150
	comp.windows.x -	0	23	17	3	2	133	2	1	1	2	0	5	3	0	2	0	0	1	0	0		
	misc.forsale -	0	1	1	8	4	3	146	3	6	2	4	2	4	0	6	0	0	0	1	0		- 125
as	rec.autos -	2	1	0	0	0	0	7	157	11	0	0	3	10	2	3	0	7	0	2	0		
ader	rec.motorcycles -	0	0	0	1	0	0	3	17	183	2	1	1	2	5	0	0	4	0	2	1		
Etiquetas Verdaderas	rec.sport.baseball -	2	2	0	0	0	0	2	1	1	188	10	0	0	0	1	0	0	0	1	1		- 100
as V	rec.sport.hockey -	1	1	1	0	0	0	3	0	1	7	176	1	0	1	1	0	0	0	0	0		
net	sci.crypt -	3	4	3	0	3	7	0	0	1	1	0	143	6	0	0	1	13	0	6	0		
Etic	sci.electronics -	2	5	8	15	10	1	20	5	10	0	2	5	130	2	4	1	0	1	0	0		- 75
	sci.med -	3	4	0	0	0	1	0	2	5	1	0	2	1	169	8	0	3	1	1	0		
	sci.space -	4	4	0	0	0	3	1	2	3	3	1	2	2	3	144	1	5	1	4	1		- 50
	soc.religion.christian -	15	2	0	0	0	0	0	0	1	3	0	1	0	3	1	188	0	5	2	1		
	talk.politics.guns -	4	0	0	0	0	0	1	0	3	3	0	7	0	4	0	1	126	6	3	0		
	talk.politics.mideast -	9	2	1	0	4	0	0	0	2	1	0	3	0	0	0	1	4	163	4	0		- 25
	talk.politics.misc -	8	2	1	0	0	0	0	1	3	0	0	4	1	4	3	1	20	4	89	0		
	talk.religion.misc -	21	1	0	0	0	1	0	0	5	0	0	1	0	2	2	41	20	3	2	24		
		alt.atheism -	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale -	rec.autos -	rec.motorcycles -	rec.sport.baseball -	rec.sport.hockey -	sci.crypt -	sci.electronics -	sci.med -	sci.space -	soc.religion.christian -	talk.politics.guns -	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc -		- 0

Etiquetas Predichas

XBOOT

/		-			-	,
Métricas	e^n	\triangle	con-	111n + 0	de	nriieha.
IICCIICC	C_{11}	\sim \perp	\sim \sim \sim \sim \sim	Julico	ac	pracha.

ricerred en er conjunce d	precision	recall	f1-score	support
7	0 50	0 67	060	1.40
alt.atheism	0.58	0.67	0.62	148
comp.graphics	0.59	0.70	0.64	199
comp.os.ms-windows.misc	0.67	0.67	0.67	195
comp.sys.ibm.pc.hardware	0.64	0.57	0.60	191
comp.sys.mac.hardware	0.68	0.69	0.68	183
comp.windows.x	0.66	0.67	0.66	195
misc.forsale	0.63	0.79	0.70	191
rec.autos	0.85	0.77	0.81	205
rec.motorcycles	0.83	0.81	0.82	222
rec.sport.baseball	0.88	0.91	0.90	209
rec.sport.hockey	0.94	0.91	0.93	193
sci.crypt	0.84	0.77	0.81	191
sci.electronics	0.74	0.64	0.69	221
sci.med	0.86	0.84	0.85	201
sci.space	0.83	0.80	0.82	184
soc.religion.christian	0.76	0.82	0.79	222
talk.politics.guns	0.68	0.81	0.74	158

talk.politics.mideast	0.90	0.87	0.89	194
talk.politics.misc	0.61	0.70	0.65	141
talk.religion.misc	0.66	0.31	0.42	123
accuracy			0.75	3766
macro avg	0.74	0.74	0.73	3766
weighted avg	0.75	0.75	0.74	3766

Matriz de Confusión alt.atheism - 99 3 0 0 0 comp.graphics - 3 139 15 comp.os.ms-windows.misc - 2 12 21 0 0 comp.sys.ibm.pc.hardware - 0 150 15 126 11 comp.sys.mac.hardware - 0 10 3 4 0 0 9 0 comp.windows.x - 0 28 16 2 3 3 1 0 0 0 0 misc.forsale - 0 - 125 rec.autos - 1 0 11 Etiquetas Verdaderas rec.motorcycles - 3 0 12 rec.sport.baseball - 2 - 100 rec.sport.hockey - 0 0 0 - 75 sci.electronics - 1 sci.space - 5 - 50 soc.religion.christian - 16 182 talk.politics.guns - 2 0 0 1 0 1 2 10 0 0 0 - 25 talk.politics.mideast - 6 talk.politics.misc - 8 16 0 0 talk.religion.misc - 19 0 1 - 0 soc.religion.christian comp.graphics sci.med comp.sys.ibm.pc.hardware comp.sys.mac.hardware talk.politics.guns comp.os.ms-windows.misc comp.windows.x misc.forsale rec.autos rec.motorcycles rec.sport.baseball rec.sport.hockey sci.crypt sci.electronics talk.politics.mideast talk.politics.misc talk.religion.misc

Etiquetas Predichas

Gllove - Twiter 200

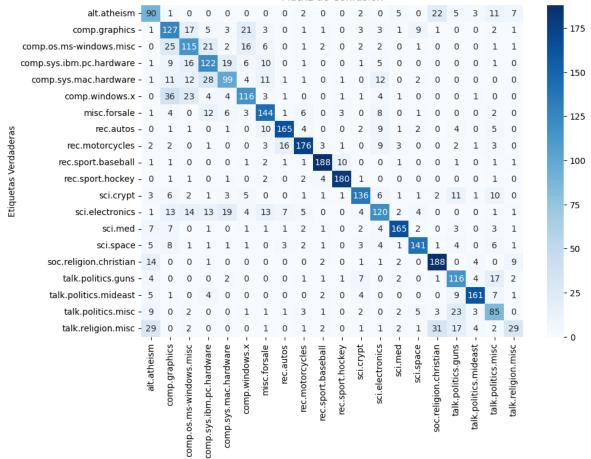
SVC

Métricas en el conjunto de prueba:

-	precision	recall	f1-score	support
alt.atheism	0.52	0.61	0.56	148
comp.graphics	0.50	0.64	0.56	199
comp.os.ms-windows.misc	0.56	0.59	0.57	195
comp.sys.ibm.pc.hardware	0.57	0.64	0.60	191
comp.sys.mac.hardware	0.62	0.54	0.58	183

<pre>comp.windows.x misc.forsale</pre>	0.65 0.69	0.59 0.75	0.62 0.72	195 191
rec.autos	0.84	0.80	0.82	205
rec.motorcycles	0.84	0.79	0.81	222
rec.sport.baseball	0.90	0.90	0.90	209
rec.sport.hockey	0.91	0.93	0.92	193
sci.crypt	0.79	0.71	0.75	191
sci.electronics	0.64	0.54	0.59	221
sci.med	0.87	0.82	0.85	201
sci.space	0.83	0.77	0.80	184
soc.religion.christian	0.76	0.85	0.80	222
talk.politics.guns	0.59	0.73	0.66	158
talk.politics.mideast	0.88	0.83	0.86	194
talk.politics.misc	0.54	0.60	0.57	141
talk.religion.misc	0.54	0.24	0.33	123
accuracy			0.71	3766
macro avg	0.70	0.69	0.69	3766
weighted avg	0.71	0.71	0.71	3766

Matriz de Confusión



Etiquetas Predichas

RF

Métricas en el conjunto d	le prueba:			
	precision	recall	f1-score	support
	0 50	0 ==	0 50	4.40
alt.atheism	0.50	0.55	0.52	148
comp.graphics	0.51	0.56	0.54	199
comp.os.ms-windows.misc	0.61	0.56	0.59	195
comp.sys.ibm.pc.hardware	0.53	0.54	0.54	191
comp.sys.mac.hardware	0.61	0.49	0.55	183
comp.windows.x	0.58	0.64	0.61	195
misc.forsale	0.61	0.78	0.69	191
rec.autos	0.76	0.72	0.74	205
rec.motorcycles	0.65	0.76	0.70	222
rec.sport.baseball	0.76	0.87	0.81	209
rec.sport.hockey	0.87	0.88	0.87	193
sci.crypt	0.70	0.68	0.69	191
sci.electronics	0.73	0.48	0.58	221
sci.med	0.81	0.79	0.80	201
sci.space	0.72	0.76	0.74	184
soc.religion.christian	0.72	0.84	0.77	222
talk.politics.guns	0.60	0.77	0.68	158
talk.politics.mideast	0.86	0.82	0.84	194
talk.politics.misc	0.60	0.56	0.58	141
talk.religion.misc	0.80	0.20	0.31	123
accuracy			0.67	3766
macro avg	0.68	0.66	0.66	3766
weighted avg	0.68	0.67	0.67	3766

									Ma	triz	de	Con	fusi	ón									
	alt.atheism -	81	0	0	0	0	1	0	0	5	3	1	1	0	7	3	26	4	5	10	1		
	comp.graphics -	4	112	13	6	3	21	10	1	3	3	1	8	0	1	13	0	0	0	0	0	-	175
	comp.os.ms-windows.misc -	1	18	110	18	4	22	6	1	3	3	0	4	1	1	2	0	0	0	1	0		
	comp.sys.ibm.pc.hardware -	0	9	18	103	20	8	16	4	4	1	1	0	4	2	0	0	0	0	0	1		150
	comp.sys.mac.hardware -	2	8	7	37	90	6	17	2	6	1	0	2	3	1	1	0	0	0	0	0		- 150
	comp.windows.x -	0	25	18	5	3	124	5	0	1	1	1	7	3	1	1	0	0	0	0	0		
	misc.forsale -	0	4	1	8	4	2	149	3	6	5	3	2	1	0	1	0	0	0	2	0		125
as	rec.autos -	1	2	0	1	1	0	8	148	19	1	0	3	9	1	4	0	5	2	0	0		
ader	rec.motorcycles -	0	1	0	1	0	1	4	22	168	5	1	0	5	3	2	1	6	1	1	0		
Etiquetas Verdaderas	rec.sport.baseball -	2	1	0	0	0	1	2	1	3	182	12	0	1	0	0	1	0	0	3	0	-	100
as V	rec.sport.hockey -	2	0	0	0	1	0	1	0	2	15	169	1	0	1	0	0	0	0	1	0		
net	sci.crypt -	2	6	2	2	1	13	1	1	1	1	0	129	5	6	1	1	12	1	6	0		
Etic	sci.electronics -	2	7	9	13	19	9	19	7	9	2	0	7	105	1	8	0	3	0	1	0		- 75
	sci.med -	3	10	0	0	1	3	1	0	5	1	0	3	3	158	5	1	3	0	4	0		
	sci.space -	3	9	0	0	0	0	2	2	8	3	2	2	4	2	139	1	1	0	6	0		- 50
	soc.religion.christian -	18	3	0	0	0	0	0	0	1	3	1	0	0	1	0	187	0	4	2	2		
	talk.politics.guns -	2	1	0	0	0	0	1	1	3	3	1	4	0	2	2	0	122	5	10	1		
	talk.politics.mideast -	11	1	0	0	0	0	0	1	1	2	0	5	0	1	2	0	5	160	4	1		- 25
	talk.politics.misc -	8	1	1	0	0	1	1	1	2	3	0	3	0	4	6	2	24	5	79	0		
	talk.religion.misc -	20	0	0	0	0	0	1	0	7	0	1	2	0	1	4	41	18	2	2	24		
		alt.atheism –	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale -	rec.autos -	rec.motorcycles -	rec.sport.baseball -	rec.sport.hockey -	sci.crypt -	sci.electronics -	sci.med -	sci.space -	soc.religion.christian -	talk.politics.guns -	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc -		- 0

Etiquetas Predichas

XBOOT

Métricas en el conjunto de prueba:

ricerred en er conjunce d	precision	recall	f1-score	support
alt atheigm	0.58	0.60	0.59	148
alt.atheism				_
comp.graphics	0.54	0.63	0.58	199
comp.os.ms-windows.misc	0.63	0.56	0.59	195
comp.sys.ibm.pc.hardware	0.59	0.59	0.59	191
comp.sys.mac.hardware	0.60	0.57	0.59	183
comp.windows.x	0.61	0.63	0.62	195
misc.forsale	0.66	0.77	0.71	191
rec.autos	0.81	0.75	0.77	205
rec.motorcycles	0.74	0.73	0.74	222
rec.sport.baseball	0.85	0.84	0.84	209
rec.sport.hockey	0.87	0.90	0.88	193
sci.crypt	0.76	0.73	0.74	191
sci.electronics	0.64	0.57	0.60	221
sci.med	0.84	0.80	0.82	201
sci.space	0.73	0.74	0.73	184
soc.religion.christian	0.73	0.83	0.78	222
talk.politics.guns	0.63	0.73	0.68	158

talk.politics.mideast	0.90	0.84	0.87	194
talk.politics.misc	0.59	0.67	0.63	141
talk.religion.misc	0.51	0.28	0.36	123
accuracy			0.70	3766
macro avg	0.69	0.69	0.69	3766
weighted avg	0.70	0.70	0.70	3766

							Ма	triz	de	Con	fusi	ón										
89	1	0	0	0	0	0	0	1	1	0	3	0	7	4	18	4	6	7	7			
1	125	14	4	5	15	6	0	3	1	2	4	5	2	9	2	0	0	0	1			- 175
1	17	110	19	6	25	4	1	3	1	0	4	0	0	2	0	0	0	2	0			
1	6	16	112	21	10	11	1	3	0	0	1	8	0	0	0	0	0	0	1			- 150
1	5	8	24	105	7	12	4	4	0	0	1	10	0	2	0	0	0	0	0			
0	33	15	2	5	123	5	1	0	0	2	2	2	1	1	2	0	0	0	1			
0	4	1	12	4	2	147	2	3	2	1	1	7	0	1	0	0	1	2	1			- 125
1	0	0	0	1	1	6	153	15	0	1	2	15	0	3	0	4	1	2	0			
2	1	1	0	3	1	5	18	163	5	1	1	8	3	2	0	5	1	2	0			
2	1	0	0	0	1	6	0	2	175	16	0	0	1	3	0	0	0	2	0			- 100
0	0	0	0	0	0	4	0	2	10	173	0	1	0	1	1	0	0	1	0			
3	5	2	0	5	7	0	0	1	0	0	140	4	2	2	2	10	1	7	0			- 75
0	11	7	14	16	4	13	4	8	2	1	5	126	1	4	0	1	0	3	1			
2	9	0	0	1	2	0	1	3	1	0	3	4	160	5	2	2	0	5	1			
4	8	0	1	1	1	3	2	2	3	1	3	6	4	136	2	2	0	4	1			- 50
14	1	0	0	0	1	0	0	1	2	0	1	1	3	0	185	1	3	0	9			
4	0	0	0	0	0	1	0	2	1	0	3	1	2	4	3	116	2	16	3			
3	1	0	1	1	1	0	1	1	1	0	6	0	0	0	1	6	162	6	3			- 25
8	2	0	2	0	0	1	1	1	0	1	3	0	2	4	1	15	1	94	5			
17	0	1	0	0	1	0	1	1	1	0	2	0	2	4	33	18	2	5	35			- 0
alt.atheism -	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale -	rec.autos	rec.motorcycles	rec.sport.baseball	rec.sport.hockey	sci.crypt	sci.electronics	sci.med -	sci.space -	soc.religion.christian -	talk.politics.guns -	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc -			Ü
	1 1 0 0 1 2 2 0 3 0 2 4 14 4 3 8 17	1 125 1 17 1 6 1 5 0 33 0 4 1 0 2 1 2 1 0 0 3 5 0 11 2 9 4 8 14 1 4 0 3 1 8 2 17 0	1 125 14 1 17 110 1 6 16 1 5 8 0 33 15 0 4 1 1 0 0 2 1 1 2 1 0 0 0 0 3 5 2 0 11 7 2 9 0 4 8 0 14 1 0 4 0 0 3 1 0 8 2 0 17 0 1	1 125 14 4 1 17 110 19 1 6 16 112 1 5 8 24 0 33 15 2 0 4 1 12 1 0 0 0 2 1 1 0 0 0 0 0 3 5 2 0 0 11 7 14 2 9 0 0 4 8 0 1 14 1 0 0 3 1 0 1 8 2 0 2 17 0 1 0	1 125 14 4 5 1 17 110 19 6 1 6 16 112 21 1 5 8 24 105 0 33 15 2 5 0 4 1 12 4 1 0 0 0 1 2 1 1 0 0 0 3 5 2 0 5 0 11 7 14 16 2 9 0 0 1 4 8 0 1 1 14 1 0 0 0 3 1 0 1 1 8 2 0 2 0 17 0 1 0 0	1 125 14 4 5 15 1 17 110 19 6 25 1 6 16 112 21 10 1 5 8 24 105 7 0 33 15 2 5 123 0 4 1 12 4 2 1 0 0 0 1 1 2 1 0 0 0 0 1 2 1 0 0 0 0 0 3 5 2 0 5 7 0 11 7 14 16 4 2 9 0 0 1 2 4 8 0 1 1 1 14 1 0 0 0 0 0 3 1 0 1 1 1 4 0 0 0 0 0 3 1 0 1 1 1 4 0 0 0 0 0 3 1 0 1 1	1 125 14 4 5 15 6 1 17 110 19 6 25 4 1 6 16 112 21 10 11 1 5 8 24 105 7 12 0 33 15 2 5 123 5 0 4 1 12 4 2 147 1 0 0 0 1 6 2 1 1 0 3 1 5 2 1 0 0 0 1 6 0 0 0 0 0 4 3 5 2 0 5 7 0 0 11 7 14 16 4 13 2 9 0 0 1 2 0 4 8 0 1 1 1 3 14 1 0 0 0 0 1 4 0 0 0 0 0 1 3 1 0 1 1 1 0 <	89	89	89 1 0 0 0 0 0 1 3 1 1 1 3 1 1 1 3 1 1 1 3 1 1 1 3 1 1 1 3 1 1 1 3 1 1 1 3 1 1 1 3 1 1 1 0	## after items of the content of the	89	1 125 14 4 5 15 6 0 3 1 2 4 5 1 17 110 19 6 25 4 1 3 1 0 4 0 1 6 16 112 21 10 11 1 3 0 0 1 8 1 5 8 24 105 7 12 4 4 0 0 1 10 0 33 15 2 5 123 5 1 0 0 2 2 2 1 0 0 0 1 1 6 153 15 0 1 7 1 8 2 1 1 0 0 1 6 153 15 0 1 2 15 2 1 1 0 0 1 6 0 2 10 173 0 1 2 1 1	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	89 1 0 0 0 0 0 1 1 0 3 0 7 4 1 125 14 4 5 15 6 0 3 1 2 4 5 2 9 1 17 110 19 6 25 4 1 3 1 0 4 0 0 2 2 9 1 6 16 112 21 10 11 1 3 0 0 1 8 0 0 1 5 8 24 105 7 12 4 4 0 0 1 10 0 2 2 2 1 1 0 33 15 2 123 5 1 0 0 1 1 0 1 1 0 0 1 1 0 0 1 </td <td>1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td> <td> 1</td> <td>## Be defined by the control of the</td> <td>8</td> <td>1 1 0 0 0 0 1 3 1 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0</td> <td>89</td> <td>89</td>	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1	## Be defined by the control of the	8	1 1 0 0 0 0 1 3 1 0 1 1 0 0 1 1 0 0 1 1 0 0 1 1 0	89	89

Etiquetas Predichas

Fasttext

SVC

Métricas en el conjunto de prueba:

-	precision	recall	f1-score	support
alt.atheism	0.57	0.70	0.63	148
comp.graphics	0.62	0.71	0.66	199
comp.os.ms-windows.misc	0.62	0.61	0.61	195
comp.sys.ibm.pc.hardware	0.64	0.61	0.62	191
comp.sys.mac.hardware	0.72	0.67	0.69	183

comp.windows.x	0.74	0.76	0.75	195
misc.forsale	0.68	0.81	0.74	191
rec.autos	0.85	0.77	0.81	205
rec.motorcycles	0.85	0.85	0.85	222
rec.sport.baseball	0.88	0.88	0.88	209
rec.sport.hockey	0.90	0.88	0.89	193
sci.crypt	0.84	0.83	0.83	191
sci.electronics	0.75	0.71	0.73	221
sci.med	0.89	0.83	0.86	201
sci.space	0.85	0.80	0.83	184
soc.religion.christian	0.78	0.84	0.81	222
talk.politics.guns	0.68	0.81	0.74	158
talk.politics.mideast	0.92	0.88	0.90	194
talk.politics.misc	0.62	0.64	0.63	141
talk.religion.misc	0.60	0.32	0.41	123
accuracy			0.76	3766
macro avg	0.75	0.74	0.74	3766
weighted avg	0.76	0.76	0.76	3766
weighted avg	0.76	0.76	0.76	3766

Matriz de Confusión alt.atheism - 103 1 0 0 0 0 0 1 1 17 comp.graphics - 0 142 175 comp.os.ms-windows.misc - 1 18 119 16 comp.sys.ibm.pc.hardware - 1 10 24 116 12 4 14 0 1 0 0 0 0 0 0 - 150 10 19 122 comp.sys.mac.hardware - 0 12 comp.windows.x - 0 18 18 3 0 misc.forsale - 0 - 125 0 Etiquetas Verdaderas rec.motorcycles - 0 188 2 0 12 - 100 rec.sport.baseball - 3 0 1 184 169 rec.sport.hockey - 1 0 sci.crypt - 3 - 75 sci.electronics - 0 sci.med - 8 0 sci.space - 2 0 0 50 soc.religion.christian - 16 talk.politics.guns - 3 128 0 0 0 10 talk.politics.mideast - 5 0 0 - 25 0 0 0 0 0 0 3 0 talk.politics.misc - 8 talk.religion.misc - 25 0 - 0 talk.politics.misc comp.graphics rec.sport.hockey soc.religion.christian sci.crypt sci.electronics sci.med alt.atheism comp.os.ms-windows.misc comp.sys.ibm.pc.hardware comp.sys.mac.hardware comp.windows.x misc.forsale rec.autos rec.motorcycles rec.sport.baseball talk.politics.guns talk.politics.mideast talk.religion.misc

Etiquetas Predichas

RF

Métricas en el conjunto d	le prueba:			
j	precision	recall	f1-score	support
alt.atheism	0.58	0.56	0.57	148
comp.graphics	0.61	0.64	0.62	199
comp.os.ms-windows.misc	0.65	0.58	0.61	195
<pre>comp.sys.ibm.pc.hardware</pre>	0.56	0.57	0.56	191
comp.sys.mac.hardware	0.65	0.56	0.60	183
comp.windows.x	0.66	0.74	0.70	195
misc.forsale	0.60	0.68	0.64	191
rec.autos	0.82	0.71	0.76	205
rec.motorcycles	0.73	0.81	0.77	222
rec.sport.baseball	0.77	0.83	0.80	209
rec.sport.hockey	0.81	0.89	0.85	193
sci.crypt	0.75	0.75	0.75	191
sci.electronics	0.72	0.58	0.64	221
sci.med	0.83	0.83	0.83	201
sci.space	0.77	0.80	0.78	184
soc.religion.christian	0.71	0.86	0.78	222
talk.politics.guns	0.62	0.81	0.71	158
talk.politics.mideast	0.87	0.84	0.85	194
talk.politics.misc	0.62	0.62	0.62	141
talk.religion.misc	0.81	0.20	0.32	123
accuracy			0.71	3766
macro avg	0.71	0.69	0.69	3766
weighted avg	0.71	0.71	0.70	3766

									Ma	triz	de	Con	fusi	ón									
	alt.atheism -	83	1	0	0	0	0	0	0	6	2	0	2	0	6	2	26	4	5	10	1		
	comp.graphics -	1	127	15	9	2	19	7	0	1	2	1	4	2	2	6	0	0	0	1	0		- 175
	comp.os.ms-windows.misc -	2	13	113	14	5	27	5	1	2	2	0	5	4	0	1	0	0	0	1	0		
	comp.sys.ibm.pc.hardware -	0	9	13	108	23	7	15	1	1	0	1	3	8	1	0	0	1	0	0	0		
	comp.sys.mac.hardware -	0	8	6	28	102	4	19	1	2	3	1	1	6	0	2	0	0	0	0	0		- 150
	comp.windows.x -	1	17	17	2	1	144	2	1	0	3	0	4	1	0	2	0	0	0	0	0		
	misc.forsale -	0	4	2	12	8	5	129	4	8	2	5	1	4	1	4	0	0	1	1	0		- 125
as	rec.autos -	0	1	0	0	0	3	5	146	15	1	2	3	12	2	4	1	5	3	2	0		- 125
ader	rec.motorcycles -	1	0	0	1	1	0	3	17	180	4	1	0	3	2	0	1	3	1	4	0		
Etiquetas Verdaderas	rec.sport.baseball -	2	0	0	1	0	2	3	0	0	173	21	0	0	1	0	0	1	0	4	1		- 100
as V	rec.sport.hockey -	0	1	0	1	1	0	1	0	1	15	171	1	0	1	0	0	0	0	0	0		
net	sci.crypt -	1	3	2	2	2	5	1	0	3	2	0	144	6	1	0	0	11	1	6	1		
Eţi	sci.electronics -	1	11	4	13	10	1	20	3	4	0	1	9	129	3	10	1	0	0	0	1		- 75
	sci.med -	4	4	0	1	0	0	1	0	5	1	1	2	3	166	6	0	1	1	5	0		
	sci.space -	0	4	1	1	1	0	1	1	6	4	3	1	1	1	147	3	3	0	6	0		- 50
	soc.religion.christian -	14	2	0	0	0	0	0	1	0	1	1	0	0	4	0	191	1	5	1	1		-
	talk.politics.guns -	2	0	0	0	0	1	0	1	4	3	0	8	1	1	0	0	128	4	4	1		
	talk.politics.mideast -	5	2	0	0	1	0	1	0	3	2	0	2	0	0	1	1	6	163	7	0		- 25
	talk.politics.misc -	7	1	1	0	0	0	2	1	2	2	0	1	0	3	5	3	23	2	88	0		
	talk.religion.misc -	18	0	0	1	0	1	0	0	2	4	1	0	0	5	1	43	18	2	2	25		
		alt.atheism -	comp.graphics -	comp.os.ms-windows.misc -	comp.sys.ibm.pc.hardware -	comp.sys.mac.hardware -	comp.windows.x -	misc.forsale -	rec.autos -	rec.motorcycles -	rec.sport.baseball -	rec.sport.hockey -	sci.crypt -	sci.electronics -	sci.med -	sci.space -	soc.religion.christian -	talk.politics.guns -	talk.politics.mideast -	talk.politics.misc -	talk.religion.misc -		- 0

Etiquetas Predichas

XBoost

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ricerreas en er conjuntes a	precision	recall	f1-score	support
	precision	recarr	11 30016	Support
alt.atheism	0.60	0.64	0.62	148
comp.graphics	0.65	0.71	0.68	199
comp.os.ms-windows.misc	0.66	0.62	0.64	195
comp.sys.ibm.pc.hardware	0.61	0.60	0.60	191
comp.sys.mac.hardware	0.64	0.58	0.61	183
comp.windows.x	0.71	0.72	0.72	195
misc.forsale	0.67	0.81	0.73	191
rec.autos	0.85	0.76	0.80	205
rec.motorcycles	0.80	0.79	0.79	222
rec.sport.baseball	0.84	0.84	0.84	209
rec.sport.hockey	0.86	0.88	0.87	193
sci.crypt	0.84	0.81	0.82	191
sci.electronics	0.72	0.68	0.70	221
sci.med	0.84	0.81	0.83	201
sci.space	0.79	0.77	0.78	184
soc.religion.christian	0.74	0.82	0.78	222
talk.politics.guns	0.64	0.79	0.71	158

talk.politics.mideast	0.90	0.88	0.89	194
talk.politics.misc	0.61	0.66	0.63	141
talk.religion.misc	0.58	0.33	0.42	123
accuracy			0.74	3766
macro avg	0.73	0.72	0.72	3766
weighted avg	0.74	0.74	0.73	3766

Matriz de Confusión

0

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talk.politics.mideast talk.politics.misc 41

talk.religion.misc

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- 75

- 50

- 25

- 0

Micro-F1 Score: 0.7353

alt.atheism - 95 1 0 0 0 0 comp.graphics - 0 141 11 comp.os.ms-windows.misc - 1 16 120 13 19 0 comp.sys.ibm.pc.hardware - 0

11 27 106 comp.sys.mac.hardware - 0 3 20 comp.windows.x - 1 19 19 2 3 141 misc.forsale - 0 155 rec.autos - 1 0

Etiquetas Verdaderas rec.motorcycles - 0 1 rec.sport.baseball - 3 rec.sport.hockey - 0 sci.electronics - 0

> sci.space - 2 soc.religion.christian - 17 talk.politics.guns - 4 talk.politics.mideast - 3 talk.politics.misc - 9

0 talk.religion.misc - 15 0 0 comp.graphics alt.atheism

comp.sys.ibm.pc.hardware comp.os.ms-windows.misc

0 0

14 0 0 0 3 0 1 1 0 0 0 0 comp.sys.mac.hardware misc.forsale rec.sport.baseball rec.sport.hockey comp.windows.x rec.autos rec.motorcycles sci.crypt

0 0 1 sci.electronics sci.med sci.space

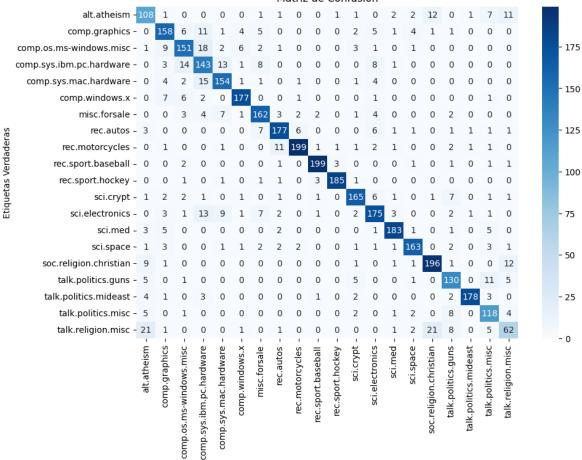
soc.religion.christian talk.politics.guns Etiquetas Predichas

BERT

	precision	recall	f1-score	support
alt.atheism comp.graphics	0.67	0.73	0.70	148 199
comp.os.ms-windows.misc	0.79	0.77	0.78	195
comp.sys.ibm.pc.hardware	0.68	0.75	0.71	191
comp.sys.mac.hardware	0.81	0.84	0.83	183
comp.windows.x	0.91	0.91	0.91	195
misc.forsale	0.83	0.85	0.84	191
rec.autos	0.87	0.86	0.87	205

rec.motorcycles rec.sport.baseball rec.sport.hockey sci.crypt sci.electronics sci.med sci.space soc.religion.christian talk.politics.guns talk.politics.mideast talk.politics.misc	0.94 0.96 0.97 0.88 0.82 0.93 0.91 0.85 0.77 0.98	0.90 0.95 0.96 0.86 0.79 0.91 0.89 0.88 0.82 0.92	0.92 0.95 0.97 0.87 0.80 0.92 0.90 0.87 0.80 0.95	222 209 193 191 221 201 184 222 158 194 141
talk.religion.misc	0.63	0.50	0.56	123
accuracy macro avg weighted avg	0.84	0.84	0.85 0.84 0.85	3766 3766 3766

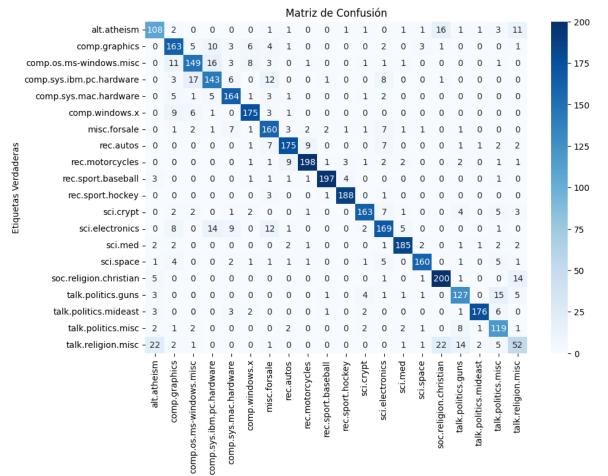
Matriz de Confusión



Etiquetas Predichas

Distilbert

	precision	recall	f1-score	support
alt.atheism	0.72	0.73	0.73	148
comp.graphics	0.77	0.82	0.79	199
comp.os.ms-windows.misc	0.81	0.76	0.78	195
<pre>comp.sys.ibm.pc.hardware</pre>	0.75	0.75	0.75	191
comp.sys.mac.hardware	0.83	0.90	0.86	183
comp.windows.x	0.88	0.90	0.89	195
misc.forsale	0.75	0.84	0.79	191
rec.autos	0.88	0.85	0.87	205
rec.motorcycles	0.93	0.89	0.91	222
rec.sport.baseball	0.97	0.94	0.95	209
rec.sport.hockey	0.95	0.97	0.96	193
sci.crypt	0.91	0.85	0.88	191
sci.electronics	0.79	0.76	0.78	221
sci.med	0.93	0.92	0.92	201
sci.space	0.94	0.87	0.90	184
soc.religion.christian	0.83	0.90	0.87	222
talk.politics.guns	0.78	0.80	0.79	158
talk.politics.mideast	0.97	0.91	0.94	194
talk.politics.misc	0.72	0.84	0.78	141
talk.religion.misc	0.56	0.42	0.48	123
_				
accuracy			0.84	3766
macro avq	0.83	0.83	0.83	3766
weighted avg	0.84	0.84	0.84	3766
- 5 5				



Etiquetas Predichas