

Avg_word2vec Note

window size = 9

LR:

Accuracy: 0.84

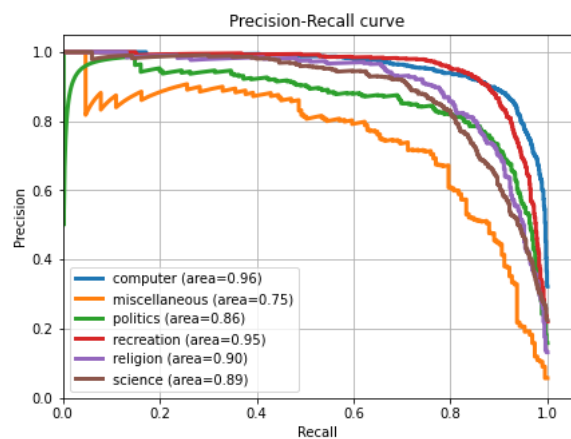
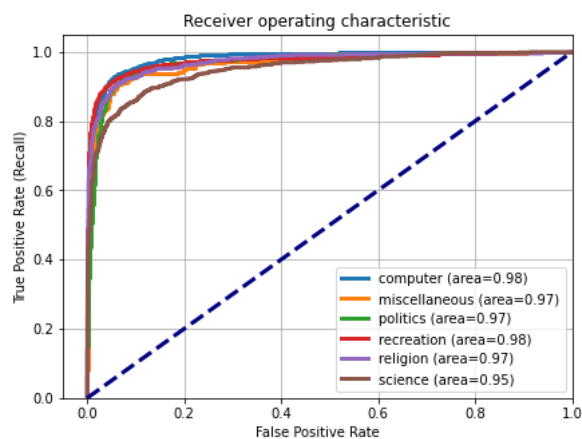
Auc: 0.97

Detail:

	precision	recall	f1-score	support
computer	0.88	0.91	0.89	953
miscellaneous	0.80	0.63	0.70	191
politics	0.78	0.84	0.81	510
recreation	0.88	0.88	0.88	751
religion	0.87	0.79	0.83	478
science	0.80	0.81	0.80	764
accuracy			0.84	3647
macro avg	0.84	0.81	0.82	3647
weighted avg	0.84	0.84	0.84	3647

Confusion matrix

True	computer	867	13	4	13	6	50
	miscellaneous	31	120	5	19	1	15
	politics	5	1	428	20	31	25
	recreation	15	6	21	664	5	40
	religion	12	0	48	16	380	22
	science	60	10	45	20	12	617
			computer	miscellaneous	politics	recreation	religion
		Pred					



SVM:

Accuracy: 0.86

Auc: 0.98

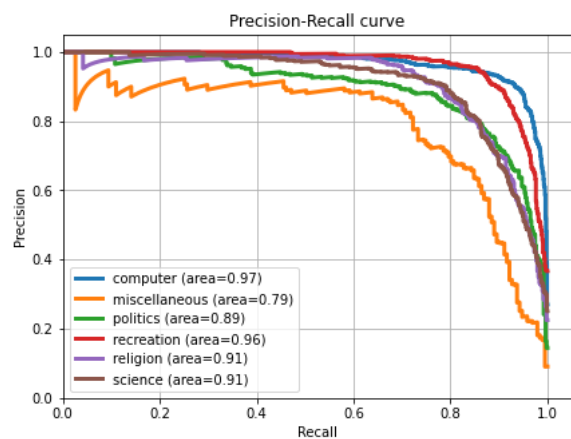
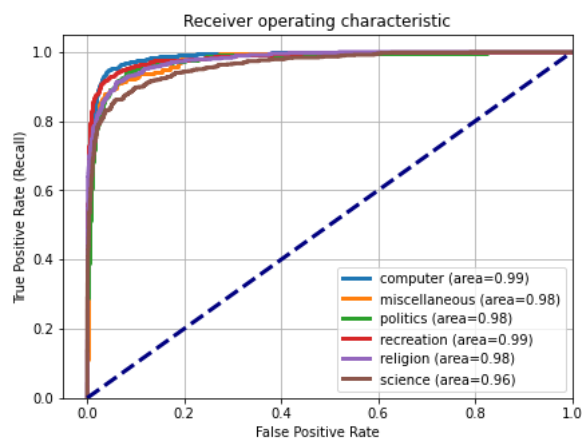
Detail:

	precision	recall	f1-score	support
computer	0.88	0.94	0.91	953
miscellaneous	0.84	0.69	0.76	191
politics	0.78	0.85	0.81	510
recreation	0.90	0.89	0.90	751
religion	0.89	0.79	0.84	478
science	0.84	0.82	0.83	764
accuracy			0.86	3647
macro avg	0.85	0.83	0.84	3647
weighted avg	0.86	0.86	0.86	3647

Confusion matrix

	computer	miscellaneous	politics	recreation	religion	science
True computer	895	11	3	11	6	27
True miscellaneous	25	132	5	15	0	14
True politics	5	2	435	19	26	23
True recreation	16	6	20	670	5	34
True religion	14	0	55	12	380	17
True science	61	7	42	19	10	625
	computer	miscellaneous	politics	recreation	religion	science

Pred



window size = 38

LR:

Accuracy: 0.85

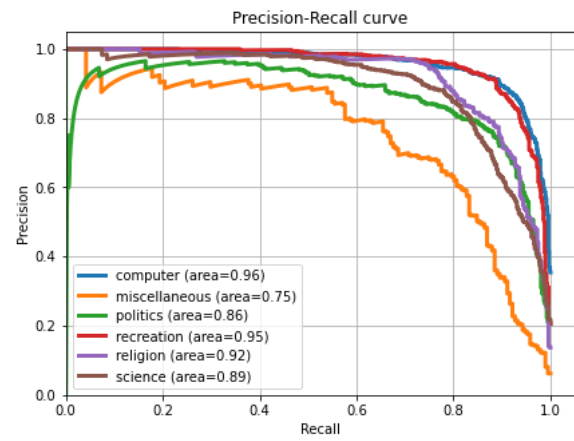
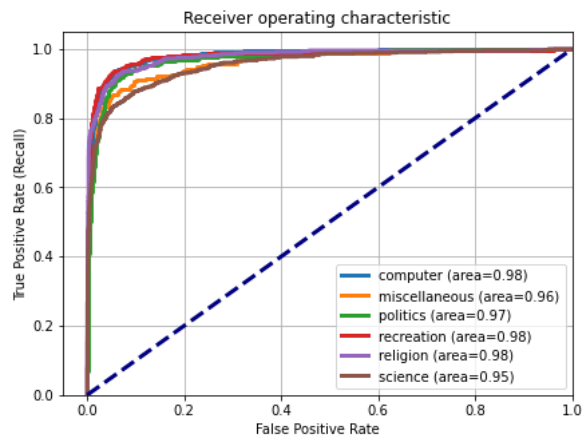
Auc: 0.97

Detail:

	precision	recall	f1-score	support
computer	0.90	0.90	0.90	953
miscellaneous	0.78	0.65	0.71	191
politics	0.78	0.83	0.80	510
recreation	0.89	0.88	0.88	751
religion	0.86	0.83	0.84	478
science	0.82	0.82	0.82	764
accuracy			0.85	3647
macro avg	0.84	0.82	0.83	3647
weighted avg	0.85	0.85	0.85	3647

Confusion matrix

	computer	miscellaneous	politics	recreation	religion	science
True computer	861	19	4	13	6	50
True miscellaneous	26	125	4	20	0	16
True politics	0	1	424	16	41	28
True recreation	15	7	25	664	8	32
True religion	12	0	44	13	397	12
True science	48	8	44	24	11	629
	computer	miscellaneous	politics	recreation	religion	science
	Pred					



SVM:

Accuracy: 0.87

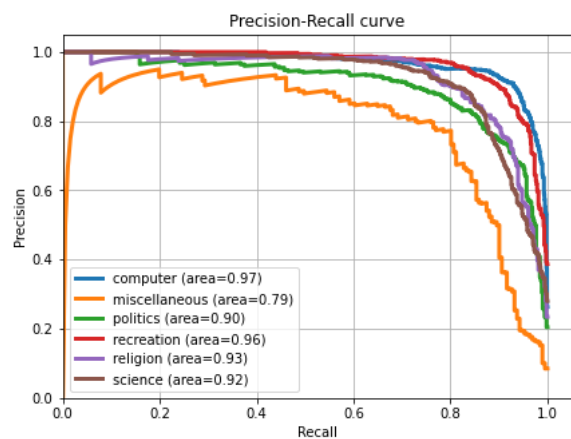
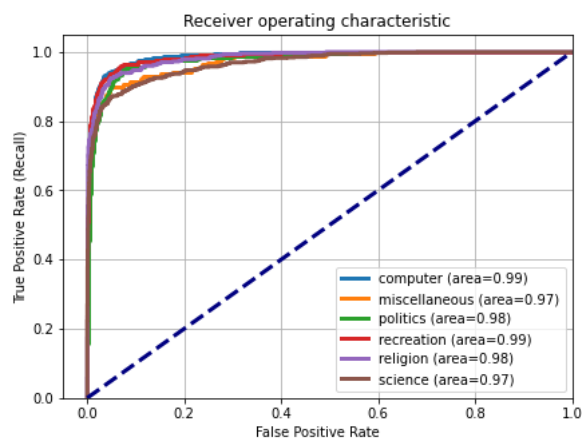
Auc: 0.98

Detail:

	precision	recall	f1-score	support
computer	0.89	0.93	0.91	953
miscellaneous	0.80	0.70	0.75	191
politics	0.78	0.86	0.82	510
recreation	0.90	0.89	0.90	751
religion	0.90	0.82	0.86	478
science	0.87	0.84	0.85	764
accuracy			0.87	3647
macro avg	0.86	0.84	0.85	3647
weighted avg	0.87	0.87	0.87	3647

Confusion matrix

	computer	miscellaneous	politics	recreation	religion	science
True computer	886	16	6	10	3	32
True miscellaneous	26	134	4	15	0	12
True politics	6	1	437	15	34	17
True recreation	18	6	25	669	6	27
True religion	14	0	46	13	394	11
True science	48	10	42	20	3	641
	computer	miscellaneous	politics	recreation	religion	science
	Pred					



window size = 75

LR:

Accuracy: 0.85

Auc: 0.97

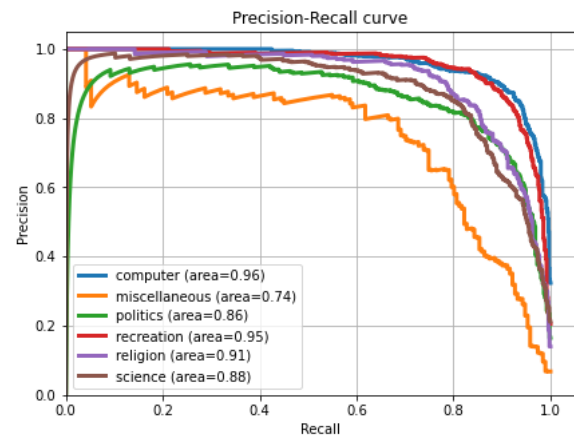
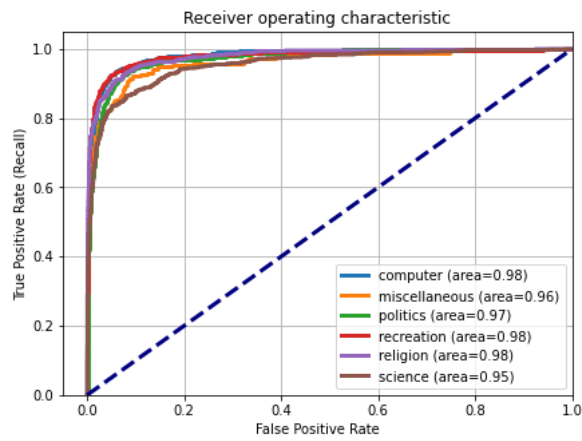
Detail:

	precision	recall	f1-score	support
computer	0.88	0.91	0.90	953
miscellaneous	0.78	0.65	0.71	191
politics	0.78	0.84	0.81	510
recreation	0.88	0.88	0.88	751
religion	0.87	0.82	0.84	478
science	0.82	0.82	0.82	764
accuracy			0.85	3647
macro avg	0.84	0.82	0.83	3647
weighted avg	0.85	0.85	0.85	3647

Confusion matrix

	computer	miscellaneous	politics	recreation	religion	science
True computer	869	16	5	14	2	47
True miscellaneous	30	124	3	17	1	16
True politics	1	0	430	18	34	27
True recreation	17	8	26	663	9	28
True religion	14	0	43	16	390	15
True science	51	10	42	23	14	624
	computer	miscellaneous	politics	recreation	religion	science

Pred



SVM:

Accuracy: 0.87

Auc: 0.98

Detail:

	precision	recall	f1-score	support
computer	0.88	0.93	0.91	953
miscellaneous	0.84	0.70	0.76	191
politics	0.80	0.85	0.83	510
recreation	0.90	0.90	0.90	751
religion	0.89	0.82	0.85	478
science	0.86	0.83	0.85	764
accuracy			0.87	3647
macro avg	0.86	0.84	0.85	3647
weighted avg	0.87	0.87	0.87	3647

Confusion matrix

	computer	miscellaneous	politics	recreation	religion	science
True computer	889	11	3	12	2	36
True miscellaneous	29	134	2	14	0	12
True politics	2	1	436	20	34	17
True recreation	19	4	20	677	8	23
True religion	13	0	44	15	394	12
True science	56	10	39	18	6	635
	computer	miscellaneous	politics	recreation	religion	science

Pred

