## parameters

## $Gerbrich\ Ferdinands$ 1/14/2020

ASReview takes the following parameters/arguments:

- $\bullet$  a model
- a query strategy
- ullet a balance strategy
- ullet feature extraction

со	nfigurations
model	lstm_base, lstm_pool, nb, rf, svm, dense_nn
$query\_strategy$	cluster, max, max * cluster, max * uncertainty, max * random, cluster * uncertainty, cluster * random
$balance\_strategy$	triple
$feature\_extraction$	doc2vec, tfidf, sbert, embeddingIdf, embeddingLSTM

## This leads to 210 combinations of configurations:

	model	query_strategy	balance_strategy	feature_extraction
1	lstm_base	cluster	triple	doc2vec
2	$lstm\_base$	max	triple	doc2vec
3	$lstm\_base$	max * cluster	triple	doc2vec
4	$lstm\_base$	max * uncertainty	triple	doc2vec
5	$lstm\_base$	$\max * random$	triple	doc2vec
6	$lstm\_base$	cluster * uncertainty	triple	doc2vec
7	$lstm\_base$	cluster * random	triple	doc2vec
8	$lstm\_base$	cluster	triple	tfidf
9	$lstm\_base$	max	triple	tfidf
10	$lstm\_base$	max * cluster	triple	tfidf
11	$lstm\_base$	max * uncertainty	triple	tfidf
12	$lstm\_base$	$\max * random$	triple	tfidf
13	$lstm\_base$	cluster * uncertainty	triple	tfidf
14	$lstm\_base$	cluster * random	triple	tfidf
15	$lstm\_base$	cluster	triple	sbert
16	$lstm\_base$	max	triple	sbert
17	$lstm\_base$	max * cluster	triple	sbert
18	$lstm\_base$	max * uncertainty	triple	sbert
19	$lstm\_base$	$\max * random$	triple	sbert
20	$lstm\_base$	cluster * uncertainty	triple	sbert
21	$lstm\_base$	cluster * random	triple	sbert
22	$lstm\_base$	cluster	triple	${\it embeddingIdf}$
23	$lstm\_base$	max	triple	${\it embeddingIdf}$
24	$lstm\_base$	max * cluster	triple	${\it embeddingIdf}$
25	$lstm\_base$	max * uncertainty	triple	${\it embeddingIdf}$
26	$lstm\_base$	$\max * random$	triple	${\it embeddingIdf}$
27	$lstm\_base$	cluster * uncertainty	triple	${\it embeddingIdf}$
28	$lstm\_base$	cluster * random	triple	${\rm embedding Idf}$

	model	${\tt query\_strategy}$	$balance\_strategy$	feature_extraction
29	lstm base	cluster	triple	embeddingLSTM
30	lstm base	max	triple	embeddingLSTM
31	lstm base	max * cluster	triple	embeddingLSTM
32	lstm base	max * uncertainty	triple	embeddingLSTM
33	lstm base	max * random	triple	embeddingLSTM
34	lstm base	cluster * uncertainty	triple	embeddingLSTM
35	lstm_base	cluster * random	triple	embeddingLSTM
36	lstm_pool	cluster	triple	doc2vec
37	lstm_pool	max	triple	doc2vec
38	lstm pool	max * cluster	triple	doc2vec
39	lstm_pool	max * uncertainty	triple	doc2vec
40	lstm_pool	max * random	triple	doc2vec
41	lstm_pool	cluster * uncertainty	triple	doc2vec
42	lstm_pool	cluster * random	triple	doc2vec
43	lstm_pool	cluster	triple	tfidf
44	lstm_pool	max	triple	tfidf
45	lstm_pool	max * cluster	triple	tfidf
46	lstm_pool	max * uncertainty	triple	tfidf
47	lstm_pool	max * random	triple	tfidf
48	lstm_pool	cluster * uncertainty	triple	tfidf
49	lstm_pool	cluster * random	triple	tfidf
50	lstm_pool	cluster	triple	sbert
51	lstm_pool	max	triple	sbert
52	lstm_pool	max * cluster	triple	sbert
53	lstm_pool	max * uncertainty	triple	sbert
54	lstm_pool	max * random	triple	sbert
55	lstm_pool	cluster * uncertainty	triple	sbert
56	lstm_pool	cluster * random	triple	sbert
57	lstm_pool	cluster	triple	embeddingIdf
58	lstm_pool	max	triple	embeddingIdf
59	lstm_pool	max * cluster	triple	embeddingIdf
60	lstm_pool	max * uncertainty	triple	embeddingIdf
61	lstm_pool	max * random	triple	embeddingIdf
62	lstm_pool	cluster * uncertainty	triple	embeddingIdf
63	lstm_pool	cluster * random	triple	embeddingIdf
64	lstm_pool	cluster	triple	embeddingLSTM
65	lstm_pool	max	triple	embeddingLSTM
66	lstm_pool	max * cluster	triple	embeddingLSTM
67	lstm_pool	max * uncertainty	triple	embeddingLSTM
68	lstm_pool	max * random	triple	embeddingLSTM
69	lstm_pool	cluster * uncertainty	triple	embeddingLSTM
70	lstm_pool	cluster * random	triple	embeddingLSTM
71	nb	cluster	triple	doc2vec
72	nb	max	triple	doc2vec
73	nb	max * cluster	triple	doc2vec
74	nb	max * uncertainty	triple	doc2vec
75	nb	max * random	triple	doc2vec
76	nb	cluster * uncertainty	triple	doc2vec $doc2vec$
77	nb	cluster * random	triple	doc2vec $doc2vec$
78	nb	cluster	triple	tfidf
79	nb	max	triple	tfidf
80	nb	max * cluster	triple	tfidf
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	model	query_strategy	balance_strategy	feature_extraction
81	nb	max * uncertainty	triple	tfidf
82	nb	max * random	triple	tfidf
83	nb	cluster * uncertainty	triple	tfidf
84	nb	cluster * random	triple	tfidf
85	nb	cluster	triple	sbert
86	nb	max	triple	sbert
87	nb	max * cluster	triple	sbert
88	nb	max * uncertainty	triple	sbert
89	nb	max * random	triple	sbert
90	nb	cluster * uncertainty	triple	sbert
91	nb	cluster * random	triple	sbert
92	nb	cluster	triple	embeddingIdf
93	nb	max	triple	embeddingIdf
94	nb	max * cluster	triple	embeddingIdf
95	nb	max * uncertainty	triple	embeddingIdf
96	nb	max * random	triple	embeddingIdf
97	nb	cluster * uncertainty	triple	embeddingIdf
98	nb	cluster * random	triple	embeddingIdf
99	nb	cluster	triple	embeddingLSTM
100	nb	max	triple	embeddingLSTM
101	nb	max * cluster	triple	embeddingLSTM
102	nb	max * uncertainty	triple	embeddingLSTM
103	nb	max * random	triple	embeddingLSTM
104	nb	cluster * uncertainty	triple	embeddingLSTM
105	nb	cluster * random	triple	embeddingLSTM
106	$\operatorname{rf}$	cluster	triple	doc2vec
107	$\operatorname{rf}$	max	triple	doc2vec
108	$\operatorname{rf}$	max * cluster	triple	doc2vec
109	$\operatorname{rf}$	max * uncertainty	triple	doc2vec
110	$\operatorname{rf}$	max * random	triple	doc2vec
111	$\operatorname{rf}$	cluster * uncertainty	triple	doc2vec
112	$\operatorname{rf}$	cluster * random	triple	doc2vec
113	$\operatorname{rf}$	cluster	triple	tfidf
114	$\operatorname{rf}$	max	triple	tfidf
115	$\operatorname{rf}$	max * cluster	triple	tfidf
116	$\operatorname{rf}$	max * uncertainty	triple	$\operatorname{tfidf}$
117	$\operatorname{rf}$	max * random	triple	tfidf
118	$\operatorname{rf}$	cluster * uncertainty	triple	tfidf
119	$\operatorname{rf}$	cluster * random	triple	tfidf
120	$\operatorname{rf}$	cluster	triple	sbert
121	$\operatorname{rf}$	max	triple	sbert
122	$\operatorname{rf}$	max * cluster	triple	sbert
123	$\operatorname{rf}$	max * uncertainty	triple	sbert
124	$\operatorname{rf}$	max * random	triple	sbert
125	$\operatorname{rf}$	cluster * uncertainty	triple	sbert
126	$\operatorname{rf}$	cluster * random	triple	sbert
127	rf	cluster	triple	embeddingIdf
128	rf	max	triple	embeddingIdf
129	$\operatorname{rf}$	max * cluster	triple	embeddingIdf
130	rf	max * uncertainty	triple	embeddingIdf
131	rf	max * random	triple	embeddingIdf
132	rf	cluster * uncertainty	triple	embeddingIdf
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	model	query_strategy	balance_strategy	feature_extraction
133	rf	cluster * random	triple	embeddingIdf
134	$\operatorname{rf}$	cluster	triple	embeddingLSTM
135	$\operatorname{rf}$	max	triple	${\it embeddingLSTM}$
136	$\operatorname{rf}$	max * cluster	triple	embeddingLSTM
137	$\operatorname{rf}$	max * uncertainty	triple	embeddingLSTM
138	rf	max * random	triple	${\it embeddingLSTM}$
139	$\operatorname{rf}$	cluster * uncertainty	triple	${\it embeddingLSTM}$
140	rf	cluster * random	triple	${\rm embedding LSTM}$
141	$\operatorname{svm}$	cluster	triple	doc2vec
142	$\operatorname{svm}$	max	triple	doc2vec
143	svm	max * cluster	triple	doc2vec
144	svm	max * uncertainty	triple	doc2vec
145	svm	max * random	triple	doc2vec
146	svm	cluster * uncertainty	triple	doc2vec
147	svm	cluster * random	triple	doc2vec
148	svm	cluster	triple	tfidf
149	svm	max	triple	tfidf
150	svm	max * cluster	triple	tfidf
151	svm	max * uncertainty	triple	tfidf
152	$\operatorname{svm}$	max * random	triple	tfidf
153	svm	cluster * uncertainty	triple	tfidf
154	svm	cluster * random	triple	tfidf
155	svm	cluster	triple	sbert
156	svm	max	triple	sbert
157	svm	max * cluster	triple	sbert
158	svm	max * uncertainty	triple	sbert
159	svm	max * random	triple	sbert
160	svm	cluster * uncertainty	triple	sbert
161	svm	cluster * random	triple	sbert
162	svm	cluster	triple	embeddingIdf
163	svm	max	triple	embeddingIdf
164	svm	max * cluster	triple	embeddingIdf
165	svm	max * uncertainty	triple	embeddingIdf
166	svm	max * random	triple	embeddingIdf
167	svm	cluster * uncertainty	triple	embeddingIdf
168	svm	cluster * random	triple	embeddingIdf
169	svm	cluster	triple	embeddingLSTM
170	svm	max	triple	embeddingLSTM
171	svm	max * cluster	triple	embeddingLSTM
172	svm	max * uncertainty	triple	${\it embeddingLSTM}$
173	svm	$\max * random$	triple	${\bf embedding LSTM}$
174	svm	cluster * uncertainty	triple	${\it embeddingLSTM}$
175	svm	cluster * random	triple	${\it embeddingLSTM}$
176	$dense\_nn$	cluster	triple	doc2vec
177	$dense\_nn$	max	triple	doc2vec
178	$dense\_nn$	max * cluster	triple	doc2vec
179	$dense\_nn$	max * uncertainty	triple	doc2vec
180	$dense\_nn$	max * random	triple	doc2vec
181	$dense\_nn$	cluster * uncertainty	triple	doc2vec
182	$dense\_nn$	cluster * random	triple	doc2vec
183	dense_nn	cluster	triple	tfidf
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	model	query_strategy	balance_strategy	feature_extraction
185	dense_nn	max * cluster	triple	tfidf
186	$dense\_nn$	max * uncertainty	triple	tfidf
187	$dense\_nn$	$\max * random$	triple	tfidf
188	$dense\_nn$	cluster * uncertainty	triple	tfidf
189	$dense\_nn$	cluster $*$ random	triple	tfidf
190	$dense\_nn$	cluster	triple	sbert
191	$dense\_nn$	max	triple	sbert
192	$dense\_nn$	max * cluster	triple	sbert
193	$dense\_nn$	max * uncertainty	triple	sbert
194	$dense\_nn$	$\max * random$	triple	sbert
195	$dense\_nn$	cluster * uncertainty	triple	sbert
196	$dense\_nn$	cluster * random	triple	sbert
197	$dense\_nn$	cluster	triple	${\it embeddingIdf}$
198	$dense\_nn$	max	triple	${\it embeddingIdf}$
199	$dense\_nn$	max * cluster	triple	${\it embeddingIdf}$
200	$dense\_nn$	max * uncertainty	triple	${\it embeddingIdf}$
201	$dense\_nn$	$\max * random$	triple	${\it embeddingIdf}$
202	$dense\_nn$	cluster * uncertainty	triple	${\it embeddingIdf}$
203	$dense\_nn$	cluster * random	triple	$\operatorname{embeddingIdf}$
204	$dense\_nn$	cluster	triple	${\bf embedding LSTM}$
205	$dense\_nn$	max	triple	${\bf embedding LSTM}$
206	$dense\_nn$	max * cluster	triple	${\bf embedding LSTM}$
207	$dense\_nn$	max * uncertainty	triple	${\bf embedding LSTM}$
208	$dense\_nn$	$\max * random$	triple	${\bf embedding LSTM}$
209	$dense\_nn$	cluster * uncertainty	triple	${\bf embedding LSTM}$
210	$dense\_nn$	cluster * random	triple	embeddingLSTM