

Table A: Properties Experiment

	IDFTTransform	TFTTransform	lowerCase Tokens	minTerm Freq	stemmer	tokenizer	useStopList	comment	Correct%	Incorrect %	time to build the model	time to test the model
Default	FALSE	FALSE	FALSE	1	null	wordTokenizer	null		82.3217%	17.6783%	2m 58s 0ms	330ms
	TRUE								82.3217%	17.6783%	3m 1s 510ms	170ms
		TRUE							82.3217%	17.6783%	2m 53s 0ms	370ms
			TRUE						80.6718%	19.3282%	2m 18s 460ms	140ms
				10					81.9093%	18.0907%	2m 17s 960ms	350ms
				100					81.4968%	18.5032%	0m 14s 980ms	50ms
					IteratedLovins				80.5539%	19.4461%	1m 47s 490ms	130ms
					Lovins				81.32%	18.68%	1m 51s 330ms	130ms
					Snowball				82.3217%	17.6783%	3m 14s 860ms	240ms
						Alphabetic			82.0271%	17.9729%	2m 59s 740ms	150ms
						CharacterNGram		min:1; max:3	78.02%	21.98%	2m 26s 0ms	170ms
						NGram		min:1; max:3	82.2039%	17.7961%	4m 15s 10ms	400ms
							MultiStopwords		82.3217%	17.6783%	3m 12s 580ms	210ms
							Rainbow		83.5592%	16.4408%	3m 37s 960ms	400ms
							WordsFromFile	xpo6.com/download-stop-word-list/	82.4985%	17.5015%	3m 1s 390ms	470ms
Average									81.7246%		2m 40s 685ms	
	TRUE	TRUE							82.3217%	17.6783%	3m 14s 440ms	260ms
	TRUE	TRUE		100					81.4968%	18.5032%	0m 17s 160ms	40ms
	TRUE	TRUE	TRUE	50					81.0843%	18.9157%	0m 33s 90ms	70ms
			TRUE	100					81.0843%	18.9157%	0m 35s 590ms	90ms
					Snowball		Rainbow		83.5592%	16.4408%	3m 45s 990ms	480ms
					Snowball		MultiStopwords		82.3217%	17.6783%	3m 8s 120ms	5060ms
					Snowball		WordsFromFile	xpo6.com/download-stop-word-list/	82.4985%	17.5015%	3m 57s 780ms	660ms
					Snowball	Alphabetic	Rainbow		81.1432%	18.8568%	3m 36s 310ms	220ms
					Snowball	NGram	Rainbow		81.9682%	18.0318%	5m 12s 230ms	220ms
						Alphabetic	Rainbow		81.1432%	18.8568%	3m 51s 200ms	170ms
						NGram	Rainbow		81.9682%	18.0318%	5m 52s 790ms	310ms
Average									81.8718%		3m 5s 882ms	

	Naive-Bayes (naiveBayesMultinomial)	Support Vecto Machine (SMO)	Decision Trees (J48)
Training Set (50% resample)	Time taken to build model: 0.03 seconds	Time taken to build model: 7.71 seconds	
	==== Evaluation on training set ===	==== Evaluation on training set ===	
	Time taken to test model on training data: 0.6 seconds	Time taken to test model on training data: 2.32 seconds	
	==== Summary ===	==== Summary ===	
	Correctly Classified Instances 4544 91.0621 %	Correctly Classified Instances 4821 96.6132 %	
	Incorrectly Classified Instances 446 8.9379 %	Incorrectly Classified Instances 169 3.3868 %	
	Kappa statistic 0.8843	Kappa statistic 0.9559	
	Mean absolute error 0.0184	Mean absolute error 0.1602	
	Root mean squared error 0.1265	Root mean squared error 0.2722	
	Relative absolute error 11.9757 %	Relative absolute error 104.2032 %	
	Root relative squared error 45.6282 %	Root relative squared error 98.2077 %	
	Total Number of Instances 4990	Total Number of Instances 4990	
	10 folds Cross- Validation (50% resample)	Time taken to build model: 0.02 seconds	Time taken to build model: 7.87 seconds
==== Stratified cross-validation ===		==== Stratified cross-validation ===	
==== Summary ===		==== Summary ===	
Correctly Classified Instances 4307 86.3126 %		Correctly Classified Instances 4363 87.4349 %	
Incorrectly Classified Instances 683 13.6874 %		Incorrectly Classified Instances 627 12.5651 %	
Kappa statistic 0.8229		Kappa statistic 0.8361	
Mean absolute error 0.0281		Mean absolute error 0.1608	
Root mean squared error 0.1595		Root mean squared error 0.2734	
Relative absolute error 18.3076 %		Relative absolute error 104.6106 %	
Root relative squared error 57.5491 %		Root relative squared error 98.6254 %	
Total Number of Instances 4990		Total Number of Instances 4990	
		==== Detailed Accuracy By Class ===	