

TREC-IS 2019-B Notebook Evaluator v2.3
Run: xgboost-extra (xgboost-extra.run)

EVALUATOR: Alertng Performance
Overall performance

> High Importance Alert Worth: -0.9792507204610952
> Low Importance Alert Worth: -0.0007381318579755739
> Accumulated Alert Worth: -0.48999442615953537

EVALUATOR: Information Type Categorization
Overall performance

> Information Type Precision (positive class, multi-type, macro): 0.30356262879795276
> Information Type Recall (positive class, multi-type, macro): 0.15436793863114776
> Information Type F1 (positive class, multi-type, macro): 0.17165930835538887
> Information Type Accuracy (overall, multi-type, macro): 0.9017061828661254
> High Importance Information Type Precision (positive class, multi-type, macro): 0.06966966966966967
> High Importance Information Type Recall (positive class, multi-type, macro): 0.005760610395803529
> High Importance Information Type F1 (positive class, multi-type, macro): 0.010635178826033697
> High Importance Information Type Accuracy (overall, multi-type, macro): 0.9798925858003668
> Low Importance Information Type Precision (positive class, multi-type, macro): 0.38152694850738045
> Low Importance Information Type Recall (positive class, multi-type, macro): 0.20390371470959584
> Low Importance Information Type F1 (positive class, multi-type, macro): 0.22533401819850724
> Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8756440485547112

EVALUATOR: Information Priority Level
Overall Performance

> Priority Estimation Error (mean squared error, macro): 0.07324542013501252
> Priority Estimation Error High Importance (mean squared error, macro): 0.1816835870005918
> Priority Estimation Error Low Importance (mean squared error, macro): 0.03709936451315274

LATEX

xgboost-extra & -0.9793 & -0.4900 & 0.0106 & 0.1751 & 0.9017 & 0.1817 & 0.0732 \\

EVALUATOR: Information Type Categorization (Multi-type)
Per Event Performance

floodChoco2019

Information Type Precision (positive class, multi-type, macro): 0.06184163059163059
Information Type Recall (positive class, multi-type, macro): 0.06243427366658497
Information Type F1 (positive class, multi-type, macro): 0.027424618073473035
Information Type Accuracy (overall, multi-type, macro): 0.9161311053984577
High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9931448157669237
Low Importance Information Type Precision (positive class, multi-type, macro): 0.08245550745550746
Low Importance Information Type Recall (positive class, multi-type, macro): 0.0832456982221133
Low Importance Information Type F1 (positive class, multi-type, macro): 0.03656615743129738
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.890459868608969

earthquakeCalifornia2014

Information Type Precision (positive class, multi-type, macro): 0.13171378968253966
Information Type Recall (positive class, multi-type, macro): 0.10261051207631648
Information Type F1 (positive class, multi-type, macro): 0.08746112921958711
Information Type Accuracy (overall, multi-type, macro): 0.9107611548556429
High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9829396325459318
Low Importance Information Type Precision (positive class, multi-type, macro): 0.17561838624338622
Low Importance Information Type Recall (positive class, multi-type, macro): 0.1368140161017533
Low Importance Information Type F1 (positive class, multi-type, macro): 0.11661483895944949
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8867016622922136

earthquakeBohol2013

Information Type Precision (positive class, multi-type, macro): 0.26663692970666103
Information Type Recall (positive class, multi-type, macro): 0.15659257431658238
Information Type F1 (positive class, multi-type, macro): 0.1781360070883885
Information Type Accuracy (overall, multi-type, macro): 0.9141087775982766
High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.994614970382337
Low Importance Information Type Precision (positive class, multi-type, macro): 0.355515906275548
Low Importance Information Type Recall (positive class, multi-type, macro): 0.2087900990887765
Low Importance Information Type F1 (positive class, multi-type, macro): 0.23751467611785135
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8872733800035898

hurricaneFlorence2018

Information Type Precision (positive class, multi-type, macro): 0.2573760270913798
Information Type Recall (positive class, multi-type, macro): 0.14678011591776632
Information Type F1 (positive class, multi-type, macro): 0.15174346957631776
Information Type Accuracy (overall, multi-type, macro): 0.9048285981059091
High Importance Information Type Precision (positive class, multi-type, macro): 0.13505747126436782
High Importance Information Type Recall (positive class, multi-type, macro): 0.009298401750287387
High Importance Information Type F1 (positive class, multi-type, macro): 0.016650016650016652
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9755902360944378
Low Importance Information Type Precision (positive class, multi-type, macro): 0.2981488790337171
Low Importance Information Type Recall (positive class, multi-type, macro): 0.19260735397359266
Low Importance Information Type F1 (positive class, multi-type, macro): 0.19677462055175146
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8812413854430661

shootingDallas2017

Information Type Precision (positive class, multi-type, macro): 0.15979705662126584
Information Type Recall (positive class, multi-type, macro): 0.1501080722242065
Information Type F1 (positive class, multi-type, macro): 0.11362173167997869
Information Type Accuracy (overall, multi-type, macro): 0.912
High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9980833333333333
Low Importance Information Type Precision (positive class, multi-type, macro): 0.21306274216168777
Low Importance Information Type Recall (positive class, multi-type, macro): 0.200144096298942
Low Importance Information Type F1 (positive class, multi-type, macro): 0.15149564223997158
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8833055555555556

fireYMM2016

Information Type Precision (positive class, multi-type, macro): 0.37319621185894564
Information Type Recall (positive class, multi-type, macro): 0.15624354959112033
Information Type F1 (positive class, multi-type, macro): 0.17508393760451754
Information Type Accuracy (overall, multi-type, macro): 0.8802916666666666

High Importance Information Type Precision (positive class, multi-type, macro): 0.16666666666666666
High Importance Information Type Recall (positive class, multi-type, macro): 0.0029368575624082235
High Importance Information Type F1 (positive class, multi-type, macro): 0.005772005772005773
High Importance Information Type Accuracy (overall, multi-type, macro): 0.95975
Low Importance Information Type Precision (positive class, multi-type, macro): 0.44203939358970534
Low Importance Information Type Recall (positive class, multi-type, macro): 0.20734578026735773
Low Importance Information Type F1 (positive class, multi-type, macro): 0.2315212482153548
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8538055555555556

 EVALUATOR: Information Type Categorization (Multi-type)
 Per Information Type Performance

Request-GoodsServices				
	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	7612
Request-GoodsServices	0.00	0.00	0.00	22
micro avg	1.00	1.00	1.00	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	0.99	1.00	1.00	7634
Request-SearchAndRescue				
	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	7625
Request-SearchAndRescue	0.00	0.00	0.00	9
micro avg	1.00	1.00	1.00	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	1.00	1.00	1.00	7634
Request-InformationWanted				
	precision	recall	f1-score	support
Other Classes	0.99	1.00	1.00	7563
Request-InformationWanted	0.00	0.00	0.00	71
micro avg	0.99	0.99	0.99	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	0.98	0.99	0.99	7634
CallToAction-Volunteer				
	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	7610
CallToAction-Volunteer	0.33	0.04	0.07	24
micro avg	1.00	1.00	1.00	7634
macro avg	0.67	0.52	0.54	7634
weighted avg	0.99	1.00	1.00	7634
CallToAction-Donations				
	precision	recall	f1-score	support
Other Classes	0.99	1.00	1.00	7556
CallToAction-Donations	0.80	0.41	0.54	78
micro avg	0.99	0.99	0.99	7634
macro avg	0.90	0.70	0.77	7634
weighted avg	0.99	0.99	0.99	7634
CallToAction-MovePeople				
	precision	recall	f1-score	support
Other Classes	0.99	1.00	0.99	7527
CallToAction-MovePeople	0.00	0.00	0.00	107
micro avg	0.99	0.99	0.99	7634
macro avg	0.49	0.50	0.50	7634
weighted avg	0.97	0.99	0.98	7634
Report-FirstPartyObservation				
	precision	recall	f1-score	support
Other Classes	0.94	0.92	0.93	7150
Report-FirstPartyObservation	0.10	0.14	0.12	484
micro avg	0.87	0.87	0.87	7634
macro avg	0.52	0.53	0.52	7634
weighted avg	0.89	0.87	0.88	7634

Report-ThirdPartyObservation					
	precision	recall	f1-score	support	
Other Classes	0.96	0.97	0.96	7317	
Report-ThirdPartyObservation	0.12	0.11	0.11	317	
micro avg	0.93	0.93	0.93	7634	
macro avg	0.54	0.54	0.54	7634	
weighted avg	0.93	0.93	0.93	7634	

Report-Weather					
	precision	recall	f1-score	support	
Other Classes	0.97	0.99	0.98	7334	
Report-Weather	0.55	0.18	0.27	300	
micro avg	0.96	0.96	0.96	7634	
macro avg	0.76	0.59	0.62	7634	
weighted avg	0.95	0.96	0.95	7634	

Report-EmergingThreats					
	precision	recall	f1-score	support	
Other Classes	0.94	1.00	0.97	7168	
Report-EmergingThreats	0.35	0.03	0.05	466	
micro avg	0.94	0.94	0.94	7634	
macro avg	0.65	0.51	0.51	7634	
weighted avg	0.90	0.94	0.91	7634	

Report-NewSubEvent					
	precision	recall	f1-score	support	
Other Classes	0.98	1.00	0.99	7492	
Report-NewSubEvent	0.00	0.00	0.00	142	
micro avg	0.98	0.98	0.98	7634	
macro avg	0.49	0.50	0.50	7634	
weighted avg	0.96	0.98	0.97	7634	

Report-MultimediaShare					
	precision	recall	f1-score	support	
Other Classes	0.89	0.88	0.89	6034	
Report-MultimediaShare	0.57	0.59	0.58	1600	
micro avg	0.82	0.82	0.82	7634	
macro avg	0.73	0.74	0.73	7634	
weighted avg	0.82	0.82	0.82	7634	

Report-ServiceAvailable					
	precision	recall	f1-score	support	
Other Classes	0.98	1.00	0.99	7484	
Report-ServiceAvailable	0.07	0.01	0.01	150	
micro avg	0.98	0.98	0.98	7634	
macro avg	0.52	0.50	0.50	7634	
weighted avg	0.96	0.98	0.97	7634	

Report-Factoid					
	precision	recall	f1-score	support	
Other Classes	0.88	0.99	0.93	6625	
Report-Factoid	0.68	0.16	0.25	1009	
micro avg	0.88	0.88	0.88	7634	
macro avg	0.78	0.57	0.59	7634	
weighted avg	0.86	0.88	0.84	7634	

Report-Official					
	precision	recall	f1-score	support	

Other Classes	0.97	1.00	0.98	7404
Report-Official	0.33	0.02	0.03	230
micro avg	0.97	0.97	0.97	7634
macro avg	0.65	0.51	0.51	7634
weighted avg	0.95	0.97	0.96	7634

Report-News

	precision	recall	f1-score	support
Other Classes	0.89	0.85	0.87	6158
Report-News	0.46	0.55	0.50	1476
micro avg	0.79	0.79	0.79	7634
macro avg	0.67	0.70	0.68	7634
weighted avg	0.80	0.79	0.79	7634

Report-CleanUp

	precision	recall	f1-score	support
Other Classes	0.99	1.00	1.00	7560
Report-CleanUp	0.00	0.00	0.00	74
micro avg	0.99	0.99	0.99	7634
macro avg	0.50	0.50	0.50	7634
weighted avg	0.98	0.99	0.99	7634

Report-Hashtags

	precision	recall	f1-score	support
Other Classes	0.54	0.89	0.67	3789
Report-Hashtags	0.70	0.27	0.39	3845
micro avg	0.57	0.57	0.57	7634
macro avg	0.62	0.58	0.53	7634
weighted avg	0.62	0.57	0.53	7634

Report-OriginalEvent

	precision	recall	f1-score	support
Other Classes	0.89	1.00	0.94	6750
Report-OriginalEvent	0.58	0.02	0.03	884
micro avg	0.88	0.88	0.88	7634
macro avg	0.73	0.51	0.49	7634
weighted avg	0.85	0.88	0.83	7634

Other-ContextualInformation

	precision	recall	f1-score	support
Other Classes	0.96	0.87	0.92	7364
Other-ContextualInformation	0.03	0.11	0.05	270
micro avg	0.85	0.85	0.85	7634
macro avg	0.50	0.49	0.48	7634
weighted avg	0.93	0.85	0.89	7634

Other-Advice

	precision	recall	f1-score	support
Other Classes	0.95	0.99	0.97	7183
Other-Advice	0.39	0.14	0.20	451
micro avg	0.94	0.94	0.94	7634
macro avg	0.67	0.56	0.58	7634
weighted avg	0.91	0.94	0.92	7634

Other-Sentiment

	precision	recall	f1-score	support
Other Classes	0.91	0.75	0.82	5844
Other-Sentiment	0.48	0.75	0.59	1790
micro avg	0.75	0.75	0.75	7634
macro avg	0.69	0.75	0.70	7634

weighted avg	0.81	0.75	0.77	7634
Other-Discussion				
	precision	recall	f1-score	support
Other Classes	0.92	0.96	0.94	7064
Other-Discussion	0.06	0.03	0.04	570
micro avg	0.89	0.89	0.89	7634
macro avg	0.49	0.50	0.49	7634
weighted avg	0.86	0.89	0.88	7634
Other-Irrelevant				
	precision	recall	f1-score	support
Other Classes	0.69	0.96	0.80	5013
Other-Irrelevant	0.68	0.18	0.28	2621
micro avg	0.69	0.69	0.69	7634
macro avg	0.69	0.57	0.54	7634
weighted avg	0.69	0.69	0.62	7634