

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

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EVALUATOR: Alertng Performance  
Overall performance  
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> High Importance Alert Worth: -0.9942363112391931  
> Low Importance Alert Worth: 0.0  
> Accumulated Alert Worth: -0.49711815561959655

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EVALUATOR: Information Type Categorization  
Overall performance  
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> Information Type Precision (positive class, multi-type, macro): 0.26762997107676323  
> Information Type Recall (positive class, multi-type, macro): 0.17125230968037375  
> Information Type F1 (positive class, multi-type, macro): 0.15167402877099473  
> Information Type Accuracy (overall, multi-type, macro): 0.8717688411492447  
> High Importance Information Type Precision (positive class, multi-type, macro): 0.25694444444444445  
> High Importance Information Type Recall (positive class, multi-type, macro): 0.011547441273508693  
> High Importance Information Type F1 (positive class, multi-type, macro): 0.020543684156340693  
> High Importance Information Type Accuracy (overall, multi-type, macro): 0.9795651034844118  
> Low Importance Information Type Precision (positive class, multi-type, macro): 0.2711918132875361  
> Low Importance Information Type Recall (positive class, multi-type, macro): 0.22448726581599543  
> Low Importance Information Type F1 (positive class, multi-type, macro): 0.19538414364254605  
> Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8358367537041889

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EVALUATOR: Information Priority Level  
Overall Performance  
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> Priority Estimation Error (mean squared error, macro): 0.0724101500309677  
> Priority Estimation Error High Importance (mean squared error, macro): 0.175146939584791  
> Priority Estimation Error Low Importance (mean squared error, macro): 0.038164553513026576

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LATEX  
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xgboost-event & -0.9942 & -0.4971 & 0.0205 & 0.1302 & 0.8718 & 0.1751 & 0.0724 \\

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EVALUATOR: Information Type Categorization (Multi-type)  
Per Event Performance  
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floodChoco2019

Information Type Precision (positive class, multi-type, macro): 0.06957129827631033  
Information Type Recall (positive class, multi-type, macro): 0.10005568658280924  
Information Type F1 (positive class, multi-type, macro): 0.04925816169620017  
Information Type Accuracy (overall, multi-type, macro): 0.8943873179091689  
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): 0.9910025706940874  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.09276173103508044  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.13340758211041231  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.06567754892826688  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8621822336475293

earthquakeCalifornia2014

Information Type Precision (positive class, multi-type, macro): 0.1411300219745444  
Information Type Recall (positive class, multi-type, macro): 0.13166862765551637  
Information Type F1 (positive class, multi-type, macro): 0.09216933001598802  
Information Type Accuracy (overall, multi-type, macro): 0.891732283464567  
High Importance Information Type Precision (positive class, multi-type, macro): 0.16666666666666666  
High Importance Information Type Recall (positive class, multi-type, macro): 0.01666666666666666  
High Importance Information Type F1 (positive class, multi-type, macro): 0.030303030303030304  
High Importance Information Type Accuracy (overall, multi-type, macro): 0.984251968503937  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.1326178070771703  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.1700026146517996  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.11279142992030725  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8608923884514437

earthquakeBohol2013

Information Type Precision (positive class, multi-type, macro): 0.22543963580606585  
Information Type Recall (positive class, multi-type, macro): 0.1739014086257149  
Information Type F1 (positive class, multi-type, macro): 0.16342885534507223  
Information Type Accuracy (overall, multi-type, macro): 0.909666128163705  
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): 0.9929994614970382  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.3005861810747545  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.23186854483428654  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.21790514046009632  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8818883503859271

hurricaneFlorence2018

Information Type Precision (positive class, multi-type, macro): 0.24083400769956345  
Information Type Recall (positive class, multi-type, macro): 0.1624386265266525  
Information Type F1 (positive class, multi-type, macro): 0.12752502223550333  
Information Type Accuracy (overall, multi-type, macro): 0.8770341469921301  
High Importance Information Type Precision (positive class, multi-type, macro): 0.16666666666666666  
High Importance Information Type Recall (positive class, multi-type, macro): 0.0016501650165016502  
High Importance Information Type F1 (positive class, multi-type, macro): 0.0032679738562091504  
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9762571695344805  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.2655564547105291  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.21603478036336946  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.16894403836193472  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8439598061446801

shootingDallas2017

Information Type Precision (positive class, multi-type, macro): 0.15699528992495904  
Information Type Recall (positive class, multi-type, macro): 0.1218613992238568  
Information Type F1 (positive class, multi-type, macro): 0.06610025212143479  
Information Type Accuracy (overall, multi-type, macro): 0.869750000000001  
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): 0.20932705323327871  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.16248186563180908  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.0881336694952464  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8269722222222221

fireYMM2016

Information Type Precision (positive class, multi-type, macro): 0.21573913356721683  
Information Type Recall (positive class, multi-type, macro): 0.1681463466655445  
Information Type F1 (positive class, multi-type, macro): 0.1302194151775624  
Information Type Accuracy (overall, multi-type, macro): 0.849812500000001

High Importance Information Type Precision (positive class, multi-type, macro): 0.2708333333333333  
High Importance Information Type Recall (positive class, multi-type, macro): 0.014822046090196675  
High Importance Information Type F1 (positive class, multi-type, macro): 0.025167627635438793  
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9584999999999999  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.19737440031184464  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.21925444685732712  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.1652366776916036  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8135833333333333

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 EVALUATOR: Information Type Categorization (Multi-type)  
 Per Information Type Performance  
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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	7624
Request-SearchAndRescue	0.00	0.00	0.00	10
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	7611
CallToAction-Volunteer	0.00	0.00	0.00	23
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
CallToAction-Donations				
	precision	recall	f1-score	support
Other Classes	0.99	1.00	0.99	7556
CallToAction-Donations	0.40	0.32	0.36	78
micro avg	0.99	0.99	0.99	7634
macro avg	0.70	0.66	0.68	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	7526
CallToAction-MovePeople	1.00	0.01	0.02	108
micro avg	0.99	0.99	0.99	7634
macro avg	0.99	0.50	0.51	7634
weighted avg	0.99	0.99	0.98	7634
Report-FirstPartyObservation				
	precision	recall	f1-score	support
Other Classes	0.95	0.81	0.87	7150
Report-FirstPartyObservation	0.10	0.32	0.15	484
micro avg	0.77	0.77	0.77	7634
macro avg	0.52	0.56	0.51	7634
weighted avg	0.89	0.77	0.82	7634

Report-ThirdPartyObservation					
	precision	recall	f1-score	support	
Other Classes	0.97	0.79	0.87	7317	
Report-ThirdPartyObservation	0.09	0.46	0.14	317	
micro avg	0.77	0.77	0.77	7634	
macro avg	0.53	0.62	0.51	7634	
weighted avg	0.93	0.77	0.84	7634	

Report-Weather					
	precision	recall	f1-score	support	
Other Classes	0.97	0.98	0.98	7334	
Report-Weather	0.47	0.35	0.40	300	
micro avg	0.96	0.96	0.96	7634	
macro avg	0.72	0.67	0.69	7634	
weighted avg	0.95	0.96	0.96	7634	

Report-EmergingThreats					
	precision	recall	f1-score	support	
Other Classes	0.94	1.00	0.97	7168	
Report-EmergingThreats	0.25	0.01	0.02	466	
micro avg	0.94	0.94	0.94	7634	
macro avg	0.59	0.50	0.49	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	0.29	0.05	0.08	142	
micro avg	0.98	0.98	0.98	7634	
macro avg	0.64	0.52	0.54	7634	
weighted avg	0.97	0.98	0.97	7634	

Report-MultimediaShare					
	precision	recall	f1-score	support	
Other Classes	0.88	0.88	0.88	6034	
Report-MultimediaShare	0.53	0.53	0.53	1600	
micro avg	0.80	0.80	0.80	7634	
macro avg	0.70	0.70	0.70	7634	
weighted avg	0.80	0.80	0.80	7634	

Report-ServiceAvailable					
	precision	recall	f1-score	support	
Other Classes	0.98	1.00	0.99	7484	
Report-ServiceAvailable	0.00	0.00	0.00	150	
micro avg	0.98	0.98	0.98	7634	
macro avg	0.49	0.50	0.49	7634	
weighted avg	0.96	0.98	0.97	7634	

Report-Factoid					
	precision	recall	f1-score	support	
Other Classes	0.89	0.97	0.93	6625	
Report-Factoid	0.49	0.21	0.29	1009	
micro avg	0.87	0.87	0.87	7634	
macro avg	0.69	0.59	0.61	7634	
weighted avg	0.84	0.87	0.84	7634	

Report-Official					
	precision	recall	f1-score	support	

Other Classes	0.97	1.00	0.98	7404
Report-Official	0.17	0.02	0.03	230
micro avg	0.97	0.97	0.97	7634
macro avg	0.57	0.51	0.51	7634
weighted avg	0.95	0.97	0.95	7634

#### Report-News

	precision	recall	f1-score	support
Other Classes	0.88	0.75	0.81	6158
Report-News	0.36	0.59	0.45	1476
micro avg	0.72	0.72	0.72	7634
macro avg	0.62	0.67	0.63	7634
weighted avg	0.78	0.72	0.74	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	0.51	0.94	0.66	3789
Report-Hashtags	0.63	0.11	0.18	3845
micro avg	0.52	0.52	0.52	7634
macro avg	0.57	0.52	0.42	7634
weighted avg	0.57	0.52	0.42	7634

#### Report-OriginalEvent

	precision	recall	f1-score	support
Other Classes	0.89	0.99	0.94	6750
Report-OriginalEvent	0.41	0.04	0.07	884
micro avg	0.88	0.88	0.88	7634
macro avg	0.65	0.52	0.50	7634
weighted avg	0.83	0.88	0.84	7634

#### Other-ContextualInformation

	precision	recall	f1-score	support
Other Classes	0.96	0.76	0.85	7364
Other-ContextualInformation	0.03	0.17	0.05	270
micro avg	0.74	0.74	0.74	7634
macro avg	0.49	0.47	0.45	7634
weighted avg	0.93	0.74	0.82	7634

#### Other-Advice

	precision	recall	f1-score	support
Other Classes	0.94	0.99	0.97	7183
Other-Advice	0.29	0.07	0.11	451
micro avg	0.94	0.94	0.94	7634
macro avg	0.62	0.53	0.54	7634
weighted avg	0.91	0.94	0.92	7634

#### Other-Sentiment

	precision	recall	f1-score	support
Other Classes	0.88	0.75	0.81	5844
Other-Sentiment	0.45	0.65	0.53	1790
micro avg	0.73	0.73	0.73	7634
macro avg	0.66	0.70	0.67	7634

weighted avg	0.78	0.73	0.75	7634
Other-Discussion				
	precision	recall	f1-score	support
Other Classes	0.92	0.82	0.87	7064
Other-Discussion	0.05	0.11	0.06	570
micro avg	0.77	0.77	0.77	7634
macro avg	0.48	0.46	0.47	7634
weighted avg	0.85	0.77	0.81	7634
Other-Irrelevant				
	precision	recall	f1-score	support
Other Classes	0.66	0.93	0.77	5013
Other-Irrelevant	0.41	0.09	0.15	2621
micro avg	0.64	0.64	0.64	7634
macro avg	0.53	0.51	0.46	7634
weighted avg	0.57	0.64	0.56	7634