

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

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EVALUATOR: Alertng Performance  
Overall performance  
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> High Importance Alert Worth: -0.9942363112391931  
> Low Importance Alert Worth: -8.964080057298528e-05  
> Accumulated Alert Worth: -0.497162976019883

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EVALUATOR: Information Type Categorization  
Overall performance  
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> Information Type Precision (positive class, multi-type, macro): 0.293911678499806  
> Information Type Recall (positive class, multi-type, macro): 0.15303652835547427  
> Information Type F1 (positive class, multi-type, macro): 0.16380728643715145  
> Information Type Accuracy (overall, multi-type, macro): 0.899686708584403  
> High Importance Information Type Precision (positive class, multi-type, macro): 0.075  
> High Importance Information Type Recall (positive class, multi-type, macro): 0.002579876013352408  
> High Importance Information Type F1 (positive class, multi-type, macro): 0.004875886524822695  
> High Importance Information Type Accuracy (overall, multi-type, macro): 0.9802855645795128  
> Low Importance Information Type Precision (positive class, multi-type, macro): 0.36688223799974135  
> Low Importance Information Type Recall (positive class, multi-type, macro): 0.2031887458028482  
> Low Importance Information Type F1 (positive class, multi-type, macro): 0.21678441974126106  
> Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8728204232526998

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EVALUATOR: Information Priority Level  
Overall Performance  
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> Priority Estimation Error (mean squared error, macro): 0.07543283449905736  
> Priority Estimation Error High Importance (mean squared error, macro): 0.1864283032108515  
> Priority Estimation Error Low Importance (mean squared error, macro): 0.03843434492845932

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LATEX  
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xgboost & -0.9942 & -0.4972 & 0.0049 & 0.1639 & 0.8997 & 0.1864 & 0.0754 \\\

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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): 0.05482954545454546  
Information Type Recall (positive class, multi-type, macro): 0.049605514375561544  
Information Type F1 (positive class, multi-type, macro): 0.019738681035046717  
Information Type Accuracy (overall, multi-type, macro): 0.9151670951156811  
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): 0.9957155098543273  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.0731060606060606  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.06614068583408206  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.02631824138006229  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8883176235361326

earthquakeCalifornia2014

Information Type Precision (positive class, multi-type, macro): 0.13754097653554176  
Information Type Recall (positive class, multi-type, macro): 0.10688791580889384  
Information Type F1 (positive class, multi-type, macro): 0.08956767120497289  
Information Type Accuracy (overall, multi-type, macro): 0.9130577427821521  
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): 0.1833879687140557  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.14251722107852513  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.11942356160663052  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.889763779527559

earthquakeBohol2013

Information Type Precision (positive class, multi-type, macro): 0.2605989216954164  
Information Type Recall (positive class, multi-type, macro): 0.16958077077547573  
Information Type F1 (positive class, multi-type, macro): 0.18589576575090747  
Information Type Accuracy (overall, multi-type, macro): 0.9111470113085621  
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): 0.9962304792676361  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.3474652289272218  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.22610769436730097  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.24786102100120994  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8827858553222043

hurricaneFlorence2018

Information Type Precision (positive class, multi-type, macro): 0.26908348059352494  
Information Type Recall (positive class, multi-type, macro): 0.14352480723388336  
Information Type F1 (positive class, multi-type, macro): 0.1454418061173007  
Information Type Accuracy (overall, multi-type, macro): 0.9029445111377884  
High Importance Information Type Precision (positive class, multi-type, macro): 0.13888888888888887  
High Importance Information Type Recall (positive class, multi-type, macro): 0.002697741684280788  
High Importance Information Type F1 (positive class, multi-type, macro): 0.005289019923166265  
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9762571695344805  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.3124816778284036  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.19046716241708422  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.19215940151534552  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.878506958338891

shootingDallas2017

Information Type Precision (positive class, multi-type, macro): 0.14465740624791498  
Information Type Recall (positive class, multi-type, macro): 0.1314885650576186  
Information Type F1 (positive class, multi-type, macro): 0.1031711039695274  
Information Type Accuracy (overall, multi-type, macro): 0.9136041666666669  
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): 0.19287654166388665  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.17531808674349147  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.13756147195936988  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8854444444444444

fireYMM2016

Information Type Precision (positive class, multi-type, macro): 0.3029595734256398  
Information Type Recall (positive class, multi-type, macro): 0.15788068041527656  
Information Type F1 (positive class, multi-type, macro): 0.16388246827689112  
Information Type Accuracy (overall, multi-type, macro): 0.8742916666666667

High Importance Information Type Precision (positive class, multi-type, macro): 0.05555555555555555  
High Importance Information Type Recall (positive class, multi-type, macro): 0.002824858757062147  
High Importance Information Type F1 (positive class, multi-type, macro): 0.005376344086021505  
High Importance Information Type Accuracy (overall, multi-type, macro): 0.95941666666666667  
Low Importance Information Type Precision (positive class, multi-type, macro): 0.3854275793823346  
Low Importance Information Type Recall (positive class, multi-type, macro): 0.20956595430134803  
Low Importance Information Type F1 (positive class, multi-type, macro): 0.216717843007181  
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.84591666666666664

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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	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	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	1.00	7556
CallToAction-Donations	0.76	0.36	0.49	78
micro avg	0.99	0.99	0.99	7634
macro avg	0.88	0.68	0.74	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	0.89	0.92	7150
Report-FirstPartyObservation	0.11	0.20	0.14	484
micro avg	0.85	0.85	0.85	7634
macro avg	0.53	0.55	0.53	7634
weighted avg	0.89	0.85	0.87	7634

Report-ThirdPartyObservation					
	precision	recall	f1-score	support	
Other Classes	0.96	0.95	0.96	7317	
Report-ThirdPartyObservation	0.10	0.13	0.11	317	
micro avg	0.92	0.92	0.92	7634	
macro avg	0.53	0.54	0.54	7634	
weighted avg	0.93	0.92	0.92	7634	

Report-Weather					
	precision	recall	f1-score	support	
Other Classes	0.97	0.99	0.98	7334	
Report-Weather	0.56	0.30	0.39	300	
micro avg	0.96	0.96	0.96	7634	
macro avg	0.77	0.64	0.68	7634	
weighted avg	0.96	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	0.00	0.00	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	7493	
Report-NewSubEvent	0.00	0.00	0.00	141	
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	0.89	0.89	6034	
Report-MultimediaShare	0.58	0.59	0.59	1600	
micro avg	0.82	0.82	0.82	7634	
macro avg	0.74	0.74	0.74	7634	
weighted avg	0.83	0.82	0.83	7634	

Report-ServiceAvailable					
	precision	recall	f1-score	support	
Other Classes	0.98	1.00	0.99	7484	
Report-ServiceAvailable	0.20	0.01	0.03	150	
micro avg	0.98	0.98	0.98	7634	
macro avg	0.59	0.51	0.51	7634	
weighted avg	0.97	0.98	0.97	7634	

Report-Factoid					
	precision	recall	f1-score	support	
Other Classes	0.89	0.99	0.93	6625	
Report-Factoid	0.68	0.18	0.29	1009	
micro avg	0.88	0.88	0.88	7634	
macro avg	0.78	0.58	0.61	7634	
weighted avg	0.86	0.88	0.85	7634	

Report-Official					
	precision	recall	f1-score	support	

Other Classes	0.97	1.00	0.98	7404
Report-Official	0.50	0.01	0.02	230
micro avg	0.97	0.97	0.97	7634
macro avg	0.74	0.50	0.50	7634
weighted avg	0.96	0.97	0.96	7634

#### Report-News

	precision	recall	f1-score	support
Other Classes	0.89	0.84	0.86	6158
Report-News	0.46	0.56	0.51	1476
micro avg	0.79	0.79	0.79	7634
macro avg	0.67	0.70	0.68	7634
weighted avg	0.81	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	0.52	0.92	0.66	3789
Report-Hashtags	0.67	0.16	0.26	3845
micro avg	0.54	0.54	0.54	7634
macro avg	0.59	0.54	0.46	7634
weighted avg	0.59	0.54	0.46	7634

#### Report-OriginalEvent

	precision	recall	f1-score	support
Other Classes	0.89	1.00	0.94	6750
Report-OriginalEvent	0.52	0.02	0.04	884
micro avg	0.88	0.88	0.88	7634
macro avg	0.70	0.51	0.49	7634
weighted avg	0.84	0.88	0.83	7634

#### Other-ContextualInformation

	precision	recall	f1-score	support
Other Classes	0.96	0.92	0.94	7364
Other-ContextualInformation	0.03	0.08	0.05	270
micro avg	0.89	0.89	0.89	7634
macro avg	0.50	0.50	0.49	7634
weighted avg	0.93	0.89	0.91	7634

#### Other-Advice

	precision	recall	f1-score	support
Other Classes	0.95	0.99	0.97	7183
Other-Advice	0.42	0.14	0.20	451
micro avg	0.94	0.94	0.94	7634
macro avg	0.68	0.56	0.59	7634
weighted avg	0.92	0.94	0.92	7634

#### Other-Sentiment

	precision	recall	f1-score	support
Other Classes	0.91	0.72	0.80	5844
Other-Sentiment	0.46	0.78	0.58	1790
micro avg	0.73	0.73	0.73	7634
macro avg	0.69	0.75	0.69	7634

weighted avg	0.81	0.73	0.75	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	0.49	0.49	7634
weighted avg	0.86	0.89	0.88	7634
Other-Irrelevant				
	precision	recall	f1-score	support
Other Classes	0.68	0.97	0.80	5013
Other-Irrelevant	0.70	0.13	0.21	2621
micro avg	0.68	0.68	0.68	7634
macro avg	0.69	0.55	0.51	7634
weighted avg	0.69	0.68	0.60	7634