

TREC-IS 2019-B Notebook Evaluator v2.3
Run: irlabISIBase3 (irlabISIBase3.run)

EVALUATON: Alertng Performance
Overall performance

> High Importance Alert Worth: -0.379827089337176
> Low Importance Alert Worth: -0.07830105489015718
> Accumulated Alert Worth: -0.22906407211366658

EVALUATON: Information Type Categorization
Overall performance

> Information Type Precision (positive class, multi-type, macro): 0.2991390041453454
> Information Type Recall (positive class, multi-type, macro): 0.2869873961823782
> Information Type F1 (positive class, multi-type, macro): 0.2642101888395339
> Information Type Accuracy (overall, multi-type, macro): 0.8774670334468603
> High Importance Information Type Precision (positive class, multi-type, macro): 0.16539761575762357
> High Importance Information Type Recall (positive class, multi-type, macro): 0.15013869205803357
> High Importance Information Type F1 (positive class, multi-type, macro): 0.14868167103138197
> High Importance Information Type Accuracy (overall, multi-type, macro): 0.9715963671295085
> Low Importance Information Type Precision (positive class, multi-type, macro): 0.34371946694125266
> Low Importance Information Type Recall (positive class, multi-type, macro): 0.33260363089049305
> Low Importance Information Type F1 (positive class, multi-type, macro): 0.3027196947755846
> Low Importance Information Type Accuracy (overall, multi-type, macro): 0.846090588885978

EVALUATON: Information Priority Level
Overall Performance

> Priority Estimation Error (mean squared error, macro): 0.08331287922729594
> Priority Estimation Error High Importance (mean squared error, macro): 0.11324812705179842
> Priority Estimation Error Low Importance (mean squared error, macro): 0.0733344632857951

LATEX

irlabISIBase3 & -0.3798 & -0.2291 & 0.1487 & 0.2267 & 0.8775 & 0.1132 & 0.0833 \\

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

floodChoco2019

Information Type Precision (positive class, multi-type, macro): 0.05474912413976699
Information Type Recall (positive class, multi-type, macro): 0.059830319706498956
Information Type F1 (positive class, multi-type, macro): 0.03815795021351611
Information Type Accuracy (overall, multi-type, macro): 0.9074550128534705
High Importance Information Type Precision (positive class, multi-type, macro): 0.017857142857142856
High Importance Information Type Recall (positive class, multi-type, macro): 0.08333333333333333
High Importance Information Type F1 (positive class, multi-type, macro): 0.029411764705882356
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9700085689802913
Low Importance Information Type Precision (positive class, multi-type, macro): 0.06704645123397504
Low Importance Information Type Recall (positive class, multi-type, macro): 0.051995981830887494
Low Importance Information Type F1 (positive class, multi-type, macro): 0.04107334538272736
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8866038274778635

earthquakeCalifornia2014

Information Type Precision (positive class, multi-type, macro): 0.13984963395018116
Information Type Recall (positive class, multi-type, macro): 0.1100518319777103
Information Type F1 (positive class, multi-type, macro): 0.09765954231329095
Information Type Accuracy (overall, multi-type, macro): 0.8802493438320208
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): 0.9763779527559056
Low Importance Information Type Precision (positive class, multi-type, macro): 0.18646617860024156
Low Importance Information Type Recall (positive class, multi-type, macro): 0.1467357759703614
Low Importance Information Type F1 (positive class, multi-type, macro): 0.13021272308438794
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8482064741907263

earthquakeBohol2013

Information Type Precision (positive class, multi-type, macro): 0.24854514946414094
Information Type Recall (positive class, multi-type, macro): 0.2869507080128941
Information Type F1 (positive class, multi-type, macro): 0.19948550088975014
Information Type Accuracy (overall, multi-type, macro): 0.896068928379106
High Importance Information Type Precision (positive class, multi-type, macro): 0.05416666666666667
High Importance Information Type Recall (positive class, multi-type, macro): 0.11111111111111111
High Importance Information Type F1 (positive class, multi-type, macro): 0.07196969696969698
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9892299407646742
Low Importance Information Type Precision (positive class, multi-type, macro): 0.313337977063299
Low Importance Information Type Recall (positive class, multi-type, macro): 0.34556390698015504
Low Importance Information Type F1 (positive class, multi-type, macro): 0.2419907688631011
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8650152575839167

hurricaneFlorence2018

Information Type Precision (positive class, multi-type, macro): 0.22930986397113604
Information Type Recall (positive class, multi-type, macro): 0.28627389776330475
Information Type F1 (positive class, multi-type, macro): 0.22987692393221973
Information Type Accuracy (overall, multi-type, macro): 0.8755002000800319
High Importance Information Type Precision (positive class, multi-type, macro): 0.14140923406935652
High Importance Information Type Recall (positive class, multi-type, macro): 0.1844533236095145
High Importance Information Type F1 (positive class, multi-type, macro): 0.15757921291665364
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9628518073896225
Low Importance Information Type Precision (positive class, multi-type, macro): 0.25861007393839586
Low Importance Information Type Recall (positive class, multi-type, macro): 0.3202140891479014
Low Importance Information Type F1 (positive class, multi-type, macro): 0.2539761609374085
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8463829976435018

shootingDallas2017

Information Type Precision (positive class, multi-type, macro): 0.14384891584896703
Information Type Recall (positive class, multi-type, macro): 0.157912970008576
Information Type F1 (positive class, multi-type, macro): 0.11207428752104796
Information Type Accuracy (overall, multi-type, macro): 0.88772916666666665
High Importance Information Type Precision (positive class, multi-type, macro): 0.041666666666666664
High Importance Information Type Recall (positive class, multi-type, macro): 0.018518518518518517
High Importance Information Type F1 (positive class, multi-type, macro): 0.025641025641025637
High Importance Information Type Accuracy (overall, multi-type, macro): 0.99591666666666667
Low Importance Information Type Precision (positive class, multi-type, macro): 0.17790966557640048
Low Importance Information Type Recall (positive class, multi-type, macro): 0.2043777871719285
Low Importance Information Type F1 (positive class, multi-type, macro): 0.1408853748143887
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.85166666666666668

fireYMM2016

Information Type Precision (positive class, multi-type, macro): 0.3106860196578825
Information Type Recall (positive class, multi-type, macro): 0.2559524227023815
Information Type F1 (positive class, multi-type, macro): 0.22669027877925454
Information Type Accuracy (overall, multi-type, macro): 0.86295833333333334

High Importance Information Type Precision (positive class, multi-type, macro): 0.19894754938734682
High Importance Information Type Recall (positive class, multi-type, macro): 0.10325051311540423
High Importance Information Type F1 (positive class, multi-type, macro): 0.1199203968230852
High Importance Information Type Accuracy (overall, multi-type, macro): 0.95275
Low Importance Information Type Precision (positive class, multi-type, macro): 0.34793217641472773
Low Importance Information Type Recall (positive class, multi-type, macro): 0.30685305923137396
Low Importance Information Type F1 (positive class, multi-type, macro): 0.26228023943131107
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.833027777777779

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 | 7611 |
| Request-GoodsServices | 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 |

| Request-SearchAndRescue | precision | recall | f1-score | support |
|-------------------------|-----------|--------|----------|---------|
| Other Classes | 1.00 | 1.00 | 1.00 | 7624 |
| Request-SearchAndRescue | 0.08 | 0.10 | 0.09 | 10 |
| micro avg | 1.00 | 1.00 | 1.00 | 7634 |
| macro avg | 0.54 | 0.55 | 0.54 | 7634 |
| weighted avg | 1.00 | 1.00 | 1.00 | 7634 |

| Request-InformationWanted | precision | recall | f1-score | support |
|---------------------------|-----------|--------|----------|---------|
| Other Classes | 0.99 | 1.00 | 0.99 | 7563 |
| Request-InformationWanted | 0.39 | 0.18 | 0.25 | 71 |
| micro avg | 0.99 | 0.99 | 0.99 | 7634 |
| macro avg | 0.69 | 0.59 | 0.62 | 7634 |
| weighted avg | 0.99 | 0.99 | 0.99 | 7634 |

| CallToAction-Volunteer | precision | recall | f1-score | support |
|------------------------|-----------|--------|----------|---------|
| Other Classes | 1.00 | 1.00 | 1.00 | 7610 |
| CallToAction-Volunteer | 0.31 | 0.33 | 0.32 | 24 |
| micro avg | 1.00 | 1.00 | 1.00 | 7634 |
| macro avg | 0.65 | 0.67 | 0.66 | 7634 |
| weighted avg | 1.00 | 1.00 | 1.00 | 7634 |

| CallToAction-Donations | precision | recall | f1-score | support |
|------------------------|-----------|--------|----------|---------|
| Other Classes | 1.00 | 0.99 | 0.99 | 7556 |
| CallToAction-Donations | 0.47 | 0.74 | 0.58 | 78 |
| micro avg | 0.99 | 0.99 | 0.99 | 7634 |
| macro avg | 0.73 | 0.87 | 0.79 | 7634 |
| weighted avg | 0.99 | 0.99 | 0.99 | 7634 |

| CallToAction-MovePeople | precision | recall | f1-score | support |
|-------------------------|-----------|--------|----------|---------|
| Other Classes | 0.99 | 0.99 | 0.99 | 7526 |
| CallToAction-MovePeople | 0.31 | 0.21 | 0.25 | 108 |
| micro avg | 0.98 | 0.98 | 0.98 | 7634 |
| macro avg | 0.65 | 0.60 | 0.62 | 7634 |
| weighted avg | 0.98 | 0.98 | 0.98 | 7634 |

| Report-FirstPartyObservation | precision | recall | f1-score | support |
|------------------------------|-----------|--------|----------|---------|
| Other Classes | 0.95 | 0.80 | 0.87 | 7150 |
| Report-FirstPartyObservation | 0.11 | 0.34 | 0.16 | 484 |
| micro avg | 0.77 | 0.77 | 0.77 | 7634 |
| macro avg | 0.53 | 0.57 | 0.52 | 7634 |
| weighted avg | 0.89 | 0.77 | 0.82 | 7634 |

| Report-ThirdPartyObservation | precision | recall | f1-score | support |
|------------------------------|-----------|--------|----------|---------|
| Other Classes | 0.96 | 0.89 | 0.93 | 7317 |
| Report-ThirdPartyObservation | 0.08 | 0.21 | 0.11 | 317 |
| micro avg | 0.86 | 0.86 | 0.86 | 7634 |
| macro avg | 0.52 | 0.55 | 0.52 | 7634 |
| weighted avg | 0.93 | 0.86 | 0.89 | 7634 |

| Report-Weather | precision | recall | f1-score | support |
|----------------|-----------|--------|----------|---------|
| Other Classes | 0.98 | 0.97 | 0.97 | 7334 |
| Report-Weather | 0.36 | 0.43 | 0.39 | 300 |
| micro avg | 0.95 | 0.95 | 0.95 | 7634 |
| macro avg | 0.67 | 0.70 | 0.68 | 7634 |
| weighted avg | 0.95 | 0.95 | 0.95 | 7634 |

| Report-EmergingThreats | precision | recall | f1-score | support |
|------------------------|-----------|--------|----------|---------|
| Other Classes | 0.95 | 0.97 | 0.96 | 7168 |
| Report-EmergingThreats | 0.26 | 0.14 | 0.18 | 466 |
| micro avg | 0.92 | 0.92 | 0.92 | 7634 |
| macro avg | 0.60 | 0.55 | 0.57 | 7634 |
| weighted avg | 0.90 | 0.92 | 0.91 | 7634 |

| Report-NewSubEvent | precision | recall | f1-score | support |
|--------------------|-----------|--------|----------|---------|
| Other Classes | 0.98 | 0.99 | 0.99 | 7492 |
| Report-NewSubEvent | 0.16 | 0.11 | 0.13 | 142 |
| micro avg | 0.97 | 0.97 | 0.97 | 7634 |
| macro avg | 0.57 | 0.55 | 0.56 | 7634 |
| weighted avg | 0.97 | 0.97 | 0.97 | 7634 |

| Report-MultimediaShare | precision | recall | f1-score | support |
|------------------------|-----------|--------|----------|---------|
| Other Classes | 0.87 | 0.89 | 0.88 | 6034 |
| Report-MultimediaShare | 0.55 | 0.51 | 0.53 | 1600 |
| micro avg | 0.81 | 0.81 | 0.81 | 7634 |
| macro avg | 0.71 | 0.70 | 0.70 | 7634 |
| weighted avg | 0.80 | 0.81 | 0.81 | 7634 |

| Report-ServiceAvailable | precision | recall | f1-score | support |
|-------------------------|-----------|--------|----------|---------|
| Other Classes | 0.99 | 0.97 | 0.98 | 7484 |
| Report-ServiceAvailable | 0.19 | 0.34 | 0.24 | 150 |
| micro avg | 0.96 | 0.96 | 0.96 | 7634 |
| macro avg | 0.59 | 0.66 | 0.61 | 7634 |
| weighted avg | 0.97 | 0.96 | 0.96 | 7634 |

| Report-Factoid | precision | recall | f1-score | support |
|----------------|-----------|--------|----------|---------|
| Other Classes | 0.90 | 0.94 | 0.92 | 6625 |
| Report-Factoid | 0.43 | 0.30 | 0.36 | 1009 |
| micro avg | 0.86 | 0.86 | 0.86 | 7634 |
| macro avg | 0.67 | 0.62 | 0.64 | 7634 |
| weighted avg | 0.84 | 0.86 | 0.84 | 7634 |

| Report-Official | precision | recall | f1-score | support |
|-----------------|-----------|--------|----------|---------|
|-----------------|-----------|--------|----------|---------|

| | | | | |
|-----------------|------|------|------|------|
| Other Classes | 0.97 | 0.98 | 0.97 | 7404 |
| Report-Official | 0.15 | 0.14 | 0.15 | 230 |
| micro avg | 0.95 | 0.95 | 0.95 | 7634 |
| macro avg | 0.56 | 0.56 | 0.56 | 7634 |
| weighted avg | 0.95 | 0.95 | 0.95 | 7634 |

Report-News

| | precision | recall | f1-score | support |
|---------------|-----------|--------|----------|---------|
| Other Classes | 0.88 | 0.84 | 0.86 | 6158 |
| Report-News | 0.43 | 0.50 | 0.46 | 1476 |
| micro avg | 0.77 | 0.77 | 0.77 | 7634 |
| macro avg | 0.65 | 0.67 | 0.66 | 7634 |
| weighted avg | 0.79 | 0.77 | 0.78 | 7634 |

Report-CleanUp

| | precision | recall | f1-score | support |
|----------------|-----------|--------|----------|---------|
| Other Classes | 0.99 | 1.00 | 1.00 | 7559 |
| Report-CleanUp | 0.69 | 0.15 | 0.24 | 75 |
| micro avg | 0.99 | 0.99 | 0.99 | 7634 |
| macro avg | 0.84 | 0.57 | 0.62 | 7634 |
| weighted avg | 0.99 | 0.99 | 0.99 | 7634 |

Report-Hashtags

| | precision | recall | f1-score | support |
|-----------------|-----------|--------|----------|---------|
| Other Classes | 0.56 | 0.88 | 0.68 | 3789 |
| Report-Hashtags | 0.73 | 0.31 | 0.44 | 3845 |
| micro avg | 0.60 | 0.60 | 0.60 | 7634 |
| macro avg | 0.64 | 0.60 | 0.56 | 7634 |
| weighted avg | 0.65 | 0.60 | 0.56 | 7634 |

Report-OriginalEvent

| | precision | recall | f1-score | support |
|----------------------|-----------|--------|----------|---------|
| Other Classes | 0.89 | 0.98 | 0.93 | 6750 |
| Report-OriginalEvent | 0.29 | 0.06 | 0.10 | 884 |
| micro avg | 0.87 | 0.87 | 0.87 | 7634 |
| macro avg | 0.59 | 0.52 | 0.52 | 7634 |
| weighted avg | 0.82 | 0.87 | 0.84 | 7634 |

Other-ContextualInformation

| | precision | recall | f1-score | support |
|-----------------------------|-----------|--------|----------|---------|
| Other Classes | 0.96 | 0.88 | 0.92 | 7364 |
| Other-ContextualInformation | 0.03 | 0.10 | 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 | 0.96 | 0.90 | 0.93 | 7183 |
| Other-Advice | 0.19 | 0.36 | 0.24 | 451 |
| micro avg | 0.87 | 0.87 | 0.87 | 7634 |
| macro avg | 0.57 | 0.63 | 0.59 | 7634 |
| weighted avg | 0.91 | 0.87 | 0.89 | 7634 |

Other-Sentiment

| | precision | recall | f1-score | support |
|-----------------|-----------|--------|----------|---------|
| Other Classes | 0.91 | 0.73 | 0.81 | 5844 |
| Other-Sentiment | 0.47 | 0.76 | 0.58 | 1790 |
| micro avg | 0.74 | 0.74 | 0.74 | 7634 |
| macro avg | 0.69 | 0.75 | 0.69 | 7634 |

| | | | | |
|------------------|-----------|--------|----------|---------|
| weighted avg | 0.80 | 0.74 | 0.76 | 7634 |
| Other-Discussion | | | | |
| | precision | recall | f1-score | support |
| Other Classes | 0.92 | 0.78 | 0.84 | 7064 |
| Other-Discussion | 0.06 | 0.19 | 0.10 | 570 |
| micro avg | 0.73 | 0.73 | 0.73 | 7634 |
| macro avg | 0.49 | 0.48 | 0.47 | 7634 |
| weighted avg | 0.86 | 0.73 | 0.79 | 7634 |
| Other-Irrelevant | | | | |
| | precision | recall | f1-score | support |
| Other Classes | 0.70 | 0.77 | 0.73 | 5013 |
| Other-Irrelevant | 0.45 | 0.36 | 0.40 | 2621 |
| micro avg | 0.63 | 0.63 | 0.63 | 7634 |
| macro avg | 0.57 | 0.57 | 0.57 | 7634 |
| weighted avg | 0.61 | 0.63 | 0.62 | 7634 |