

TREC-IS 2019-A Notebook Evaluator v2.0
Run: UPB-DICE ([UPB_DICE].run)

EVALUATOR: Alertng Performance
Overall performance

> High Importance Alert Worth: 0.015994236311235477
> Low Importance Alert Worth: 0.4984925483165643
> Accumulated Alert Worth: 0.2572433923138999

EVALUATOR: Information Type Categorization
Overall performance

> Information Type Precision (positive class, multi-type, macro): 0.28508961063705146
> Information Type Recall (positive class, multi-type, macro): 0.2506070213372206
> Information Type F1 (positive class, multi-type, macro): 0.21836295761920113
> Information Type Accuracy (overall, multi-type, macro): 0.8740011789363374
> High Importance Information Type Precision (positive class, multi-type, macro): 0.08008087201125176
> High Importance Information Type Recall (positive class, multi-type, macro): 0.03760133524082022
> High Importance Information Type F1 (positive class, multi-type, macro): 0.0500703564727955
> High Importance Information Type Accuracy (overall, multi-type, macro): 0.9774692166623002
> Low Importance Information Type Precision (positive class, multi-type, macro): 0.3534258568456513
> Low Importance Information Type Recall (positive class, multi-type, macro): 0.3216089167026874
> Low Importance Information Type F1 (positive class, multi-type, macro): 0.27446049133466965
> Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8395118330276831

EVALUATOR: Information Priority Level
Overall Performance

> Priority Estimation Error (mean squared error, macro): 0.06908757747782286
> Priority Estimation Error High Importance (mean squared error, macro): 0.16154442082066728
> Priority Estimation Error Low Importance (mean squared error, macro): 0.038268629696874744

LATEX

UPB-DICE & 0.0160 & 0.2572 & 0.0287 & 0.1955 & 0.8502 & 0.1615 & 0.0691 \\\

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

floodChoco2019

Information Type Precision (positive class, multi-type, macro): 0.07264390701890701
Information Type Recall (positive class, multi-type, macro): 0.12986438679245285
Information Type F1 (positive class, multi-type, macro): 0.059658971878275874
Information Type Accuracy (overall, multi-type, macro): 0.9064910025706941
High Importance Information Type Precision (positive class, multi-type, macro): 0.020833333333333333
High Importance Information Type Recall (positive class, multi-type, macro): 0.055555555555555555
High Importance Information Type F1 (positive class, multi-type, macro): 0.030303030303030304
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9785775492716366
Low Importance Information Type Precision (positive class, multi-type, macro): 0.08991409824743157
Low Importance Information Type Recall (positive class, multi-type, macro): 0.15463399720475193
Low Importance Information Type F1 (positive class, multi-type, macro): 0.06944428573669106
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.88246215367038

earthquakeCalifornia2014

Information Type Precision (positive class, multi-type, macro): 0.15956042492561448
Information Type Recall (positive class, multi-type, macro): 0.13604619010802568
Information Type F1 (positive class, multi-type, macro): 0.11737303655026698
Information Type Accuracy (overall, multi-type, macro): 0.8989501312335958
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): 0.979002624671916
Low Importance Information Type Precision (positive class, multi-type, macro): 0.21274723323415265
Low Importance Information Type Recall (positive class, multi-type, macro): 0.18139492014403424
Low Importance Information Type F1 (positive class, multi-type, macro): 0.15649738206702266
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8722659667541559

earthquakeBohol2013

Information Type Precision (positive class, multi-type, macro): 0.24570285220785046
Information Type Recall (positive class, multi-type, macro): 0.30928750534383637
Information Type F1 (positive class, multi-type, macro): 0.21081066787402336
Information Type Accuracy (overall, multi-type, macro): 0.8950592353257943
High Importance Information Type Precision (positive class, multi-type, macro): 0.018518518518518517
High Importance Information Type Recall (positive class, multi-type, macro): 0.111111111111111111
High Importance Information Type F1 (positive class, multi-type, macro): 0.03174603174603175
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9900376952073237
Low Importance Information Type Precision (positive class, multi-type, macro): 0.3214309634376278
Low Importance Information Type Recall (positive class, multi-type, macro): 0.3753463034214115
Low Importance Information Type F1 (positive class, multi-type, macro): 0.2704988799166872
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8633997486986179

hurricaneFlorence2018

Information Type Precision (positive class, multi-type, macro): 0.2826707606844794
Information Type Recall (positive class, multi-type, macro): 0.24391767814812915
Information Type F1 (positive class, multi-type, macro): 0.21018145360441087
Information Type Accuracy (overall, multi-type, macro): 0.881469254368414
High Importance Information Type Precision (positive class, multi-type, macro): 0.1231371439351066
High Importance Information Type Recall (positive class, multi-type, macro): 0.05449252790447584
High Importance Information Type F1 (positive class, multi-type, macro): 0.07552827083055297
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9735894357743096
Low Importance Information Type Precision (positive class, multi-type, macro): 0.33584863293427025
Low Importance Information Type Recall (positive class, multi-type, macro): 0.30705939489601364
Low Importance Information Type F1 (positive class, multi-type, macro): 0.25506584786236347
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8507625272331156

shootingDallas2017

Information Type Precision (positive class, multi-type, macro): 0.17352349806665976
Information Type Recall (positive class, multi-type, macro): 0.1999262090179175
Information Type F1 (positive class, multi-type, macro): 0.13046277885898988
Information Type Accuracy (overall, multi-type, macro): 0.8740625
High Importance Information Type Precision (positive class, multi-type, macro): 0.017543859649122806
High Importance Information Type Recall (positive class, multi-type, macro): 0.018518518518518517
High Importance Information Type F1 (positive class, multi-type, macro): 0.018018018018018018
High Importance Information Type Accuracy (overall, multi-type, macro): 0.99675
Low Importance Information Type Precision (positive class, multi-type, macro): 0.22551671087250538
Low Importance Information Type Recall (positive class, multi-type, macro): 0.2603954391843838
Low Importance Information Type F1 (positive class, multi-type, macro): 0.16794436580598052
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8331666666666666

fireYMM2016

Information Type Precision (positive class, multi-type, macro): 0.32794708045126036
Information Type Recall (positive class, multi-type, macro): 0.24441376940842707
Information Type F1 (positive class, multi-type, macro): 0.19553525104006098
Information Type Accuracy (overall, multi-type, macro): 0.8501875

High Importance Information Type Precision (positive class, multi-type, macro): 0.12962962962962962
High Importance Information Type Recall (positive class, multi-type, macro): 0.017795365738321012
High Importance Information Type F1 (positive class, multi-type, macro): 0.028677370449522347
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9588333333333333
Low Importance Information Type Precision (positive class, multi-type, macro): 0.39405289739180394
Low Importance Information Type Recall (positive class, multi-type, macro): 0.31995323729846237
Low Importance Information Type F1 (positive class, multi-type, macro): 0.25115454457024056
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8139722222222222

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 | 0.00 | 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 | 0.40 | 0.06 | 0.10 | 71 |
| micro avg | 0.99 | 0.99 | 0.99 | 7634 |
| macro avg | 0.70 | 0.53 | 0.55 | 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 | 0.29 | 0.08 | 0.13 | 24 |
| micro avg | 1.00 | 1.00 | 1.00 | 7634 |
| macro avg | 0.64 | 0.54 | 0.56 | 7634 |
| weighted avg | 0.99 | 1.00 | 1.00 | 7634 |
| CallToAction-Donations | | | | |
| | precision | recall | f1-score | support |
| Other Classes | 1.00 | 1.00 | 1.00 | 7556 |
| CallToAction-Donations | 0.63 | 0.73 | 0.67 | 78 |
| micro avg | 0.99 | 0.99 | 0.99 | 7634 |
| macro avg | 0.81 | 0.86 | 0.84 | 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 | 0.96 | 0.76 | 0.85 | 7150 |
| Report-FirstPartyObservation | 0.12 | 0.48 | 0.19 | 484 |
| micro avg | 0.74 | 0.74 | 0.74 | 7634 |
| macro avg | 0.54 | 0.62 | 0.52 | 7634 |
| weighted avg | 0.90 | 0.74 | 0.81 | 7634 |

| Report-ThirdPartyObservation | | | | | |
|------------------------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.97 | 0.82 | 0.89 | 7317 | |
| Report-ThirdPartyObservation | 0.10 | 0.45 | 0.16 | 317 | |
| micro avg | 0.81 | 0.81 | 0.81 | 7634 | |
| macro avg | 0.54 | 0.64 | 0.53 | 7634 | |
| weighted avg | 0.94 | 0.81 | 0.86 | 7634 | |

| Report-Weather | | | | | |
|----------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.98 | 0.98 | 0.98 | 7334 | |
| Report-Weather | 0.47 | 0.42 | 0.45 | 300 | |
| micro avg | 0.96 | 0.96 | 0.96 | 7634 | |
| macro avg | 0.73 | 0.70 | 0.71 | 7634 | |
| weighted avg | 0.96 | 0.96 | 0.96 | 7634 | |

| Report-EmergingThreats | | | | | |
|------------------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.94 | 0.98 | 0.96 | 7168 | |
| Report-EmergingThreats | 0.27 | 0.09 | 0.14 | 466 | |
| micro avg | 0.93 | 0.93 | 0.93 | 7634 | |
| macro avg | 0.61 | 0.54 | 0.55 | 7634 | |
| weighted avg | 0.90 | 0.93 | 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 | 0.82 | 0.87 | 0.85 | 6034 | |
| Report-MultimediaShare | 0.38 | 0.29 | 0.33 | 1600 | |
| micro avg | 0.75 | 0.75 | 0.75 | 7634 | |
| macro avg | 0.60 | 0.58 | 0.59 | 7634 | |
| weighted avg | 0.73 | 0.75 | 0.74 | 7634 | |

| Report-ServiceAvailable | | | | | |
|-------------------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.98 | 0.99 | 0.99 | 7484 | |
| Report-ServiceAvailable | 0.21 | 0.13 | 0.16 | 150 | |
| micro avg | 0.97 | 0.97 | 0.97 | 7634 | |
| macro avg | 0.60 | 0.56 | 0.57 | 7634 | |
| weighted avg | 0.97 | 0.97 | 0.97 | 7634 | |

| Report-Factoid | | | | | |
|----------------|-----------|--------|----------|---------|--|
| | precision | recall | f1-score | support | |
| Other Classes | 0.90 | 0.95 | 0.92 | 6625 | |
| Report-Factoid | 0.47 | 0.30 | 0.37 | 1009 | |
| micro avg | 0.86 | 0.86 | 0.86 | 7634 | |
| macro avg | 0.69 | 0.63 | 0.65 | 7634 | |
| weighted avg | 0.84 | 0.86 | 0.85 | 7634 | |

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

| | | | | |
|-----------------|------|------|------|------|
| Other Classes | 0.97 | 1.00 | 0.98 | 7404 |
| Report-Official | 0.32 | 0.03 | 0.06 | 230 |
| micro avg | 0.97 | 0.97 | 0.97 | 7634 |
| macro avg | 0.65 | 0.52 | 0.52 | 7634 |
| weighted avg | 0.95 | 0.97 | 0.96 | 7634 |

Report-News

| | precision | recall | f1-score | support |
|---------------|-----------|--------|----------|---------|
| Other Classes | 0.92 | 0.75 | 0.82 | 6158 |
| Report-News | 0.41 | 0.72 | 0.52 | 1476 |
| micro avg | 0.74 | 0.74 | 0.74 | 7634 |
| macro avg | 0.66 | 0.74 | 0.67 | 7634 |
| weighted avg | 0.82 | 0.74 | 0.77 | 7634 |

Report-CleanUp

| | precision | recall | f1-score | support |
|----------------|-----------|--------|----------|---------|
| Other Classes | 0.99 | 1.00 | 0.99 | 7559 |
| Report-CleanUp | 0.30 | 0.04 | 0.07 | 75 |
| micro avg | 0.99 | 0.99 | 0.99 | 7634 |
| macro avg | 0.65 | 0.52 | 0.53 | 7634 |
| weighted avg | 0.98 | 0.99 | 0.99 | 7634 |

Report-Hashtags

| | precision | recall | f1-score | support |
|-----------------|-----------|--------|----------|---------|
| Other Classes | 0.52 | 0.93 | 0.67 | 3789 |
| Report-Hashtags | 0.71 | 0.17 | 0.27 | 3845 |
| micro avg | 0.55 | 0.55 | 0.55 | 7634 |
| macro avg | 0.62 | 0.55 | 0.47 | 7634 |
| weighted avg | 0.62 | 0.55 | 0.47 | 7634 |

Report-OriginalEvent

| | precision | recall | f1-score | support |
|----------------------|-----------|--------|----------|---------|
| Other Classes | 0.89 | 0.99 | 0.93 | 6750 |
| Report-OriginalEvent | 0.34 | 0.06 | 0.10 | 884 |
| micro avg | 0.88 | 0.88 | 0.88 | 7634 |
| macro avg | 0.62 | 0.52 | 0.52 | 7634 |
| weighted avg | 0.83 | 0.88 | 0.84 | 7634 |

Other-ContextualInformation

| | precision | recall | f1-score | support |
|-----------------------------|-----------|--------|----------|---------|
| Other Classes | 0.96 | 0.79 | 0.87 | 7364 |
| Other-ContextualInformation | 0.02 | 0.14 | 0.04 | 270 |
| micro avg | 0.77 | 0.77 | 0.77 | 7634 |
| macro avg | 0.49 | 0.47 | 0.45 | 7634 |
| weighted avg | 0.93 | 0.77 | 0.84 | 7634 |

Other-Advice

| | precision | recall | f1-score | support |
|---------------|-----------|--------|----------|---------|
| Other Classes | 0.96 | 0.92 | 0.94 | 7183 |
| Other-Advice | 0.26 | 0.47 | 0.33 | 451 |
| micro avg | 0.89 | 0.89 | 0.89 | 7634 |
| macro avg | 0.61 | 0.69 | 0.64 | 7634 |
| weighted avg | 0.92 | 0.89 | 0.90 | 7634 |

Other-Sentiment

| | precision | recall | f1-score | support |
|-----------------|-----------|--------|----------|---------|
| Other Classes | 0.93 | 0.67 | 0.78 | 5844 |
| Other-Sentiment | 0.44 | 0.83 | 0.58 | 1790 |
| micro avg | 0.71 | 0.71 | 0.71 | 7634 |
| macro avg | 0.68 | 0.75 | 0.68 | 7634 |

| | | | | |
|------------------|-----------|--------|----------|---------|
| weighted avg | 0.81 | 0.71 | 0.73 | 7634 |
| Other-Discussion | | | | |
| | precision | recall | f1-score | support |
| Other Classes | 0.92 | 0.85 | 0.89 | 7064 |
| Other-Discussion | 0.06 | 0.11 | 0.07 | 570 |
| micro avg | 0.80 | 0.80 | 0.80 | 7634 |
| macro avg | 0.49 | 0.48 | 0.48 | 7634 |
| weighted avg | 0.86 | 0.80 | 0.82 | 7634 |
| Other-Irrelevant | | | | |
| | precision | recall | f1-score | support |
| Other Classes | 0.74 | 0.89 | 0.80 | 5013 |
| Other-Irrelevant | 0.64 | 0.39 | 0.49 | 2621 |
| micro avg | 0.72 | 0.72 | 0.72 | 7634 |
| macro avg | 0.69 | 0.64 | 0.65 | 7634 |
| weighted avg | 0.70 | 0.72 | 0.70 | 7634 |