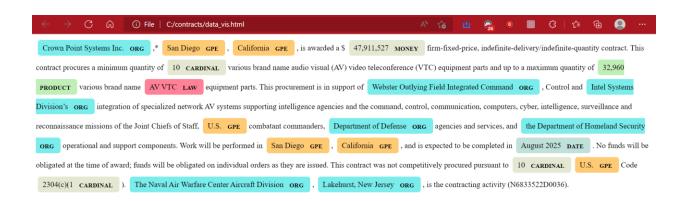
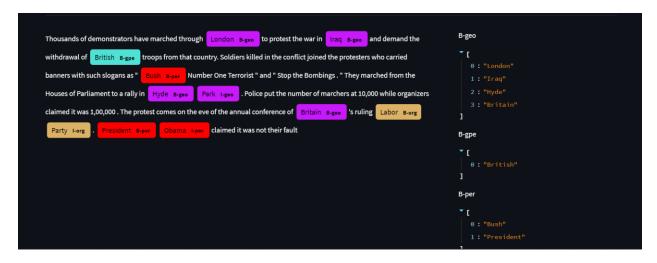
```
======= Training pipeline =====================
  Pipeline: ['tok2vec', 'ner']
  Initial learn rate: 0.001
Ε
              LOSS TOK2VEC LOSS NER
                                       ENTS_F
                                                ENTS_P
                                                         ENTS_R
                                                                  SCORE
  0
           0
                       0.00
                               162.19
                                          0.00
                                                           0.00
                                                                    0.00
                                                   0.00
  0
         200
                   3069.94
                              5873.56
                                         81.99
                                                  82.12
                                                          81.86
                                                                    0.82
                    834.98
  1
                                                          85.36
         400
                              1501.30
                                         86.68
                                                  88.04
                                                                    0.87
  2
         600
                   1580.63
                              1099.55
                                         86.59
                                                  87.33
                                                          85.85
                                                                    0.87
                  34746.65
  3
                              1237.58
                                         85.88
                                                          85.13
         800
                                                  86.65
                                                                    0.86
  4
        1000
                   2013.02
                                         87.16
                                                  87.36
                                                          86.97
                                                                    0.87
                               990.67
  5
                    956.66
                               836.98
                                         88.89
                                                  89.62
                                                          88.18
                                                                    0.89
        1200
                    1248.84
                                                          83.61
  6
        1400
                               780.75
                                         85.50
                                                  87.49
                                                                    0.86
                               541.42
                                                          89.25
  8
                    420.08
                                         89.33
                                                  89.41
                                                                    0.89
        1600
 10
        1800
                    997.39
                               810.96
                                         88.13
                                                  88.49
                                                          87.77
                                                                    0.88
 12
                   1474.88
                               674.73
                                         89.09
                                                  89.66
                                                          88.54
                                                                    0.89
        2000
 15
                    862.60
                               584.25
                                         89.26
                                                  89.76
                                                          88.76
                                                                    0.89
        2200
 19
                    5274.47
        2400
                               495.29
                                         88.76
                                                  88.94
                                                          88.58
                                                                    0.89
 24
                    752.39
                                         88.93
                                                          88.49
        2600
                               373.62
                                                  89.37
                                                                    0.89
 29
                    1284.15
                                         88.83
                                                          87.60
        2800
                               467.72
                                                  90.10
                                                                    0.89
 34
        3000
                    627.91
                               245.02
                                         89.03
                                                  90.13
                                                          87.95
                                                                    0.89
 39
                    955.41
                               273.07
                                         88.62
                                                                    0.89
        3200
                                                  89.17
                                                          88.09
Saved pipeline to output directory
output\model-last
PS C:\contracts>
```



## **DOD Contracts**

F1 Score 89 same as paper



GMB f1 score 80, In paper 85

```
======== Training pipeline ======================
 Pipeline: ['tok2vec', 'ner']
 Initial learn rate: 0.001
                                                         ENTS_R
Ε
              LOSS TOK2VEC
                             LOSS NER
                                        ENTS_F
                                                ENTS_P
                                                                  SCORE
     #
           0
                                33.77
                                          0.00
  0
                      0.00
                                                   0.00
                                                           0.00
                                                                    0.00
                              3285.43
  0
        200
                    282.35
                                         73.13
                                                 84.12
                                                          64.68
                                                                    0.73
  0
        400
                    217.40
                              2552.81
                                         76.10
                                                 78.43
                                                          73.90
                                                                    0.76
  0
        600
                              2948.96
                                                          73.15
                                                                    0.77
                    236.91
                                         77.18
                                                 81.68
                                                 79.62
  0
        800
                    293.67
                              3511.85
                                         77.66
                                                          75.79
                                                                    0.78
  0
       1000
                    462.68
                              4029.33
                                                 85.51
                                                          75.52
                                         80.20
                                                                    0.80
  0
                                                          78.70
       1200
                    475.76
                              5028.32
                                         80.02
                                                 81.38
                                                                    0.80
  0
       1400
                   2794.81
                              6152.97
                                         81.07
                                                 85.59
                                                          77.00
                                                                    0.81
                                         81.42
                                                          76.24
  0
       1600
                   4204.45
                              7252.42
                                                 87.37
                                                                    0.81
                                                 85.36
  0
       1800
                   1009.34
                              8380.30
                                         81.98
                                                          78.85
                                                                    0.82
  1
       2000
                              9482.14
                                         81.55
                                                          78.31
                                                                    0.82
                   1383.25
                                                 85.07
  1
                                                          81.11
       2200
                   3945.28
                             11277.65
                                         83.02
                                                 85.02
                                                                    0.83
  1
       2400
                   2671.89
                             13026.25
                                         83.56
                                                 85.05
                                                          82.13
                                                                    0.84
  2
       2600
                   3151.07
                             11929.51
                                         83.10
                                                 83.53
                                                          82.68
                                                                    0.83
  2
                   2766.99
                                         84.04
                                                 87.01
                                                          81.27
                                                                    0.84
       2800
                             11878.01
  3
                                         83.24
                   3911.92
                             11413.26
                                                 83.99
                                                          82.50
                                                                    0.83
       3000
  3
                                         83.18
       3200
                   3053.23
                             10561.25
                                                 85.97
                                                          80.57
                                                                    0.83
  3
       3400
                                         83.57
                                                          81.94
                                                                    0.84
                   2962.31
                             10723.43
                                                 85.27
                                         83.43
  4
       3600
                   3258.68
                              9823.17
                                                 84.16
                                                          82.72
                                                                    0.83
  4
       3800
                   3498.38
                              9612.74
                                         83.66
                                                 85.97
                                                          81.48
                                                                    0.84
  5
       4000
                   3553.11
                                         83.62
                                                                    0.84
                              9639.17
                                                 85.09
                                                          82.20
  5
       4200
                   5803.79
                              9036.40
                                         83.45
                                                  84.78
                                                          82.16
                                                                    0.83
  5
       4400
                   3733.40
                              8898.94
                                         83.84
                                                 85.00
                                                          82.70
                                                                    0.84
Saved pipeline to output directory
output\model-last
PS C:\US-Voters>
```

## Voters