all_metrics

HDDCRP (all mentions)
HDDCRP (valid mentions)
HDDCRP (valid mentions)
OURS (valid mentions)

| B ³ | | | MUC | | | CEAF _E | | |
|----------------|-------|-------|-------|-------|-------|-------------------|-------|-------|
| R | Р | F1 | R | Р | F1 | R | Р | F1 |
| 67.3 | 85.6 | 75.4 | 41.7 | 74.3 | 53.4 | 79.8 | 65.1 | 71.1 |
| 83.82 | 96.84 | 89.86 | 60.4 | 88.96 | 71.95 | 91.72 | 78.36 | 84.52 |
| 83.03 | 96.85 | 89.41 | 59.41 | 88.96 | 71.24 | 91.48 | 78.23 | 84.34 |
| | | | | | | | | |

all_metrics

| CoNLL | |
|-------|------------|
| F1 | gold truth |
| 66.8 | corpus |
| 82.11 | hddcrp's |
| 81.66 | corpus |
| | hddcrp's |
| | corpus |

summary results

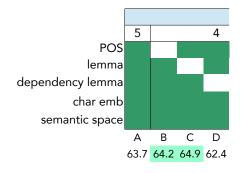
| | | gold | | | | | |
|----------|--------------------------|----------------------------|------------------------|------------|--|--|--|
| | | hddcrp's valid mentions | all corpus mentions | | | | |
| | samelemma | - | 60.2 | | | | |
| | HDDCRP | 82.1 | 66.8 | | | | |
| model | Choubey '17 | - | 68.9 | | | | |
| E | nothing (all singletons) | 49.1 | 48.6 | LOWERBOUND | | | |
| | ours (min-merge max) | 83.8 | 83.3 | UPPERBOUND | | | |
| | ours (min-merge) | 74.0 | 74.8 | ACTUAL | | | |
| | ours (min-avgmerge max) | 83.8 | 83.5 | | | | |
| | ours (min-avgmerge) | 75.3 | ? | | | | |
| | | | | | | | |
| | WITHIN-DOC PERFORMANCE | | | | | | |

74.0 = /home/ctanner/gpuVRUN_nl2_ne3_ws2_neg10_bs128_sf_e400.out:conll - f1: 0.740006733379

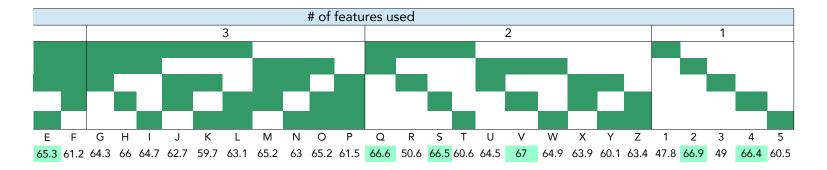
74.8 = /home/ctanner/gpuCorpusRUN_nl1_ne10_ws2_neg10_bs64_sf_e400.out:conll - f1: 0.748030955473 (sp=0.55)

conll WD scores

| | | | token embeddings | | | | | |
|----------------------------|-------------------|-------------------|-----------------------|-------------------------|-------------|----------------|----------------|-------------|
| | feature | glove corpus | sum | avg | | | | |
| | word | 400 6B 840B | | 60.60 62.52 62.74 | | | | |
| | lemma | 400 6B 840B | 65.62 66.57 ~65 | 65.56 66.39 ~65 | | | | |
| dependency | word | 6B 840B | | | | 46.16 46.17 | - | |
| parent | lemma | 6B 840B | 46.55 46.55 | - | | 46.52 46.56 | 31.35 31.35 | |
| dependency parent+children | lemma | 6B 840B | 48.64 49.26 | 31.35 31.35 | oling | 48.88 49.37 | 48.24 31.35 | - |
| character | word | concat sum | 58.68 | .50 31.35 | max pooling | 59.69 | 31.35 | ng |
| embeddings | lemma | concat sum | 66 65.07 | .55 31.35 | _ | 63.52 | 5.65 31.35 | avg pooling |
| semantic space | lemma | 300 800 | | | | | | avç |
| | token location | % 1-hot | | | | | | |
| bag of words | word | 6B 840B | | | | | | |
| 249 01 1101 43 | lemma | 6B 840B | | | | | | |



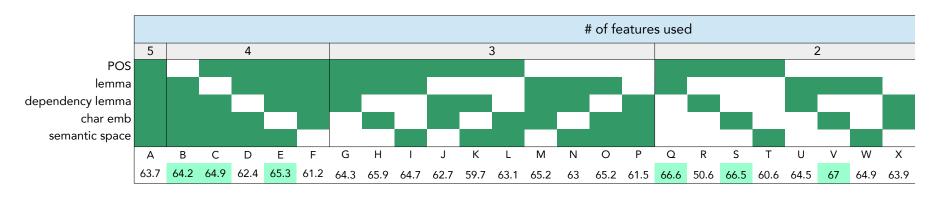
conll WD scores



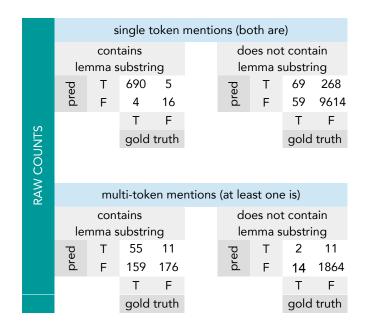
| global dir doc | | AGG 65.8 65.9 65.8 | | | |
|----------------------|------|-----------------------------|-------|----|----|
| | | | | FF | NN |
| | | | AGG | Α | В |
| | 6629 | 23-fold | 66.29 | | |
| | 6633 | 23-fold | 66.33 | | |
| | 7 | 7 – 25 | 64.82 | | |
| | 11 | 11 – 25 | 66.16 | | |
| | 15 | 15 – 25 | 66.18 | | |
| | 19 | 19 – 25 | 66.37 | | |

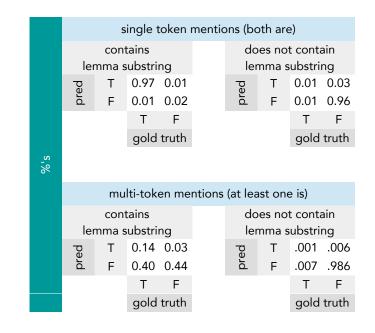
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FEATURES' EFFECTIVENESS:

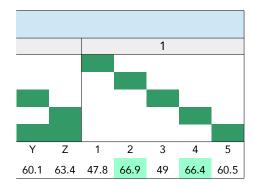


HOW TOKENS AFFECT PERFORMANCE:





conll WD scores_2



paper

training dev test

| | agg | MUC | CEAF | BCUB | CoNLL F1 66.8 |
|-----------|-----------------------------------|--------------|--------------------|---------------|------------------|
| HDDCRP | HDDCRP | | | | |
| | agg | | | | 69? |
| CCNN | deep clustering | | | | |
| test data | a: HDDCRP's parse | ed, predicte | d mentions (not | gold truth me | ntions) |
| | Choubey 17 | | | | 68 |
| | agg | | | | 70? |
| CCNN | deep clustering test data: Choube | y's mention | ns (not gold truth | mentions) | 72? |