EWT (basic)

trained on: en ewt-ud-train.iob2 + en ewt-ud-dev.iob2

tested on: lyrics_test.iob2

recall: 0.7777076097252921 precision: 0.8295722465476592 slot-f1: 0.8028031290743154

unlabeled

ul_recall: 0.8190716766656142 ul_precision: 0.8736948467497474 ul_slot-f1: 0.8455019556714474

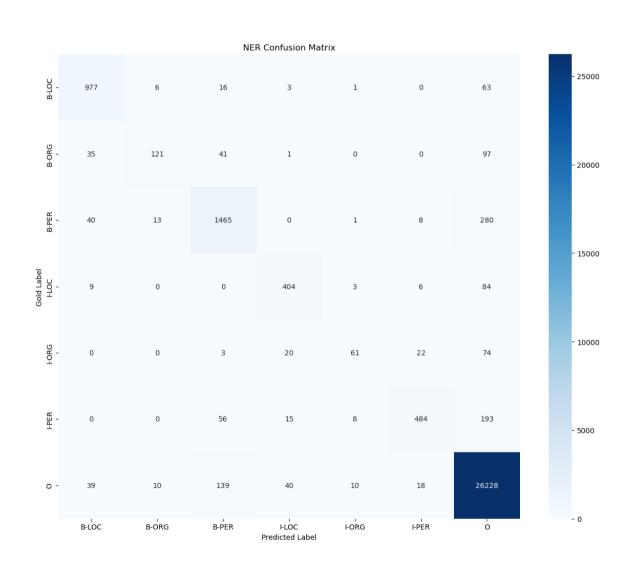
loose (partial overlap with same label)

I_recall: 0.8288601199873697
I_precision: 0.8858201414617717
I_slot-f1: 0.8563940522867102

Mistake breakdown:

Correct 29740 Wrong_label 307 Missed 791 Spurious 256 I-PER->B-PER B-ORG->B-PER B-PER->B-LOC 40 B-ORG->B-LOC 35 I-ORG->I-PER 22 I-ORG->I-LOC 20 B-LOC->B-PER 16 I-PER->I-LOC 15 B-PER->B-ORG 13 I-LOC->B-LOC I-PER->I-ORG B-PER->I-PER B-LOC->B-ORG I-LOC->I-PER 6 I-ORG->B-PER B-LOC->I-LOC I-LOC->I-ORG B-LOC->I-ORG B-ORG->I-LOC

B-PER->I-ORG



EWT (DAPT)

trained on: en_ewt-ud-train.iob2 + en_ewt-ud-dev.iob2

tested on: lyrics_test.iob2

recall: 0.7859172718661194 precision: 0.8434429007116232 slot-f1: 0.813664596273292

unlabeled

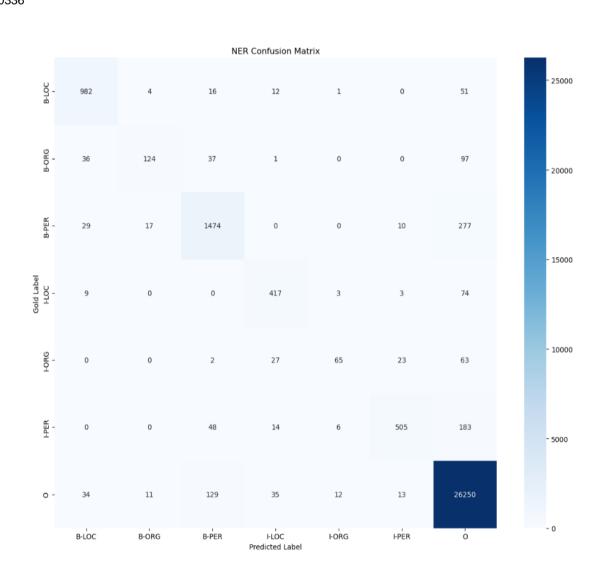
ul_recall: 0.8228607514998422 ul_precision: 0.8830904778041342 ul_slot-f1: 0.8519123896698266

loose (partial overlap with same label)

I_recall: 0.8320176823492264
I_precision: 0.8952897322941376
I_slot-f1: 0.8624948654530336

Mistake breakdown:

Correct 29817
Wrong_label 298
Missed 745
Spurious 234
I-PER->B-PER 48
B-ORG->B-PER 37
B-ORG->B-LOC 36
B-PER->B-LOC 29
I-ORG->I-LOC 27
I-ORG->I-PER 23
B-PER->B-ORG 17
B-LOC->B-PER 16
I-PER->I-LOC 14
B-LOC->I-LOC 12
B-PER->I-PER 10
I-LOC->B-LOC 9
I-PER->I-ORG 6
B-LOC->B-ORG 4
I-LOC->I-ORG 3
I-LOC->I-PER 3
I-ORG->B-PER 2
B-LOC->I-ORG 1
B-ORG->I-LOC 1



EWT (DAPT) + pop

trained on: en_ewt-ud-train.iob2 + en_ewt-ud-dev.iob2 + pop-manual-1000-train.iob2

tested on: lyrics_test.iob2

recall: 0.8575939374802652 precision: 0.8442648430214486 slot-f1: 0.8508771929824562

unlabeled

ul_recall: 0.9081149352699716 ul_precision: 0.8940006216972335 ul_slot-f1: 0.9010025062656642

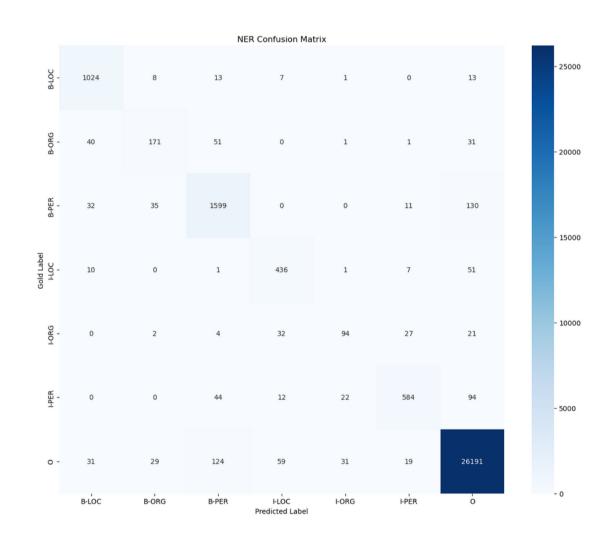
loose (partial overlap with same label)

I_recall: 0.897379223239659
I_precision: 0.887161952129313
I_slot-f1: 0.8922413385333924

Mistake breakdown:

Correct 30099 Wrong_label 362 Missed 340 Spurious 293 B-ORG->B-PER 51 I-PER->B-PER 44 B-ORG->B-LOC 40 B-PER->B-ORG 35 B-PER->B-LOC 32 I-ORG->I-LOC 32 I-ORG->I-PER 27 I-PER->I-ORG 22 B-LOC->B-PER 13 I-PER->I-LOC 12 B-PER->I-PER 11 I-LOC->B-LOC 10 B-LOC->B-ORG 8 B-LOC->I-LOC 7 I-LOC->I-PER 7 I-ORG->B-PER 4 I-ORG->B-ORG 2 I-LOC->I-ORG 1 B-LOC->I-ORG 1 B-ORG->I-ORG 1 I-LOC->B-PER 1

B-ORG->I-PER 1



EWT (DAPT) + pop (cont.)

trained on: en_ewt-ud-train.iob2 + en_ewt-ud-dev.iob2 + pop-manual-1000-train.iob2 + pop_labeled_no_2000.iob2

tested on: lyrics_test.iob2

recall: 0.8497000315756236 precision: 0.8605692356891589 slot-f1: 0.8551000953288845

unlabeled

ul_recall: 0.8958004420587307 ul_precision: 0.9072593540134314 ul_slot-f1: 0.9014934858595487

loose (partial overlap with same label)

I_recall: 0.8866435112093464
I_precision: 0.9021426287176207
I_slot-f1: 0.8943259231318492

	NER Confusion Matrix								
Mistake breakdown: Correct 30131 Wrong_label 330 Missed 423 Spurious 210 B-ORG->B-PER 53 I-PER->B-PER 49 I-ORG->I-PER 31 B-ORG->B-LOC 31 B-PER->B-ORG 25 I-ORG->I-LOC 22 B-PER->B-LOC 21 B-LOC->B-PER 18 I-PER->I-ORG 18 B-LOC->B-ORG 11 B-PER->I-PER 11 I-LOC->B-LOC 9 I-LOC->I-PER 8 I-PER->I-LOC 7 I-ORG->B-PER 4 I-ORG->B-PER 4 I-ORG->B-PER 4 I-ORG->B-PER 4 I-ORG->B-PER 1 I-LOC->I-ORG 1 B-LOC->I-ORG 1 I-LOC->I-ORG 1 I-LOC->B-PER 1	B-LOC	1006	11	18	7	1	0	23	- 25000
	B-ORG	31	165	53	0	0	0	46	- 20000
	B-PER	21	25	1591	0	0	11	159	- 15000
	Gold Label PLOC	9	0	1	431	1	8	56	13000
	FORG -	0	2	4	22	89	31	32	- 10000
	- PER	0	0	49	7	18	575	107	- 5000
	0 -	25	21	96	31	22	15	26274	- 0
		B-LOC	B-ORG	B-PER	I-LOC Predicted Label	I-ORG	I-PER	Ó	v

EWT (DAPT) + country

trained on: en_ewt-ud-train.iob2 + en_ewt-ud-dev.iob2 + country-manual-1000-train.iob2

tested on: lyrics_test.iob2

recall: 0.8680138932743922 precision: 0.8260216346153846 slot-f1: 0.8464973056197074

unlabeled

ul_recall: 0.9163245974107989 ul_precision: 0.8719951923076923 ul_slot-f1: 0.8936104695919939

loose (partial overlap with same label)

I_recall: 0.905904641616672 I_precision: 0.8620793269230769 I_slot-f1: 0.8834488067744418

Mistake breakdown: **NER Confusion Matrix** Correct 30030 25000 Wrong_label 353 13 1005 28 10 1 0 Missed 210 Spurious 501 B-ORG->B-PER 64 I-ORG->I-PER 48 B-ORG->B-LOC 39 156 0 1 64 0 35 - 20000 B-LOC->B-PER 28 B-PER->I-PER 28 I-ORG->I-LOC I-PER->B-PER 19 1672 B-PER->B-ORG 19 I-LOC->I-PER 18 15000 B-PER->B-LOC 15 B-LOC->I-LOC 10 B-LOC->B-ORG 9 0 447 I-PER->I-ORG 8 I-LOC->I-ORG 7 I-PER->I-LOC 4 10000 I-LOC->B-LOC 3 27 76 25 I-ORG->B-PER 2 I-ORG->B-ORG 2 B-LOC->I-ORG 1 B-ORG->I-PER 1 I-LOC->B-PER 1 691 0 19 34 5000 27 232 41 135 25983 30 - 0 B-ORG B-LOC B-PER I-ORG I-PER ò I-LOC Predicted Label

EWT (DAPT) + country (cont.)

trained on: en_ewt-ud-train.iob2 + en_ewt-ud-dev.iob2 + country-manual-1000-train.iob2 + country_labeled_no_2000.iob2

tested on: lyrics_test.iob2

recall: 0.8572781812440796 precision: 0.8447417548226509 slot-f1: 0.8509637987776212

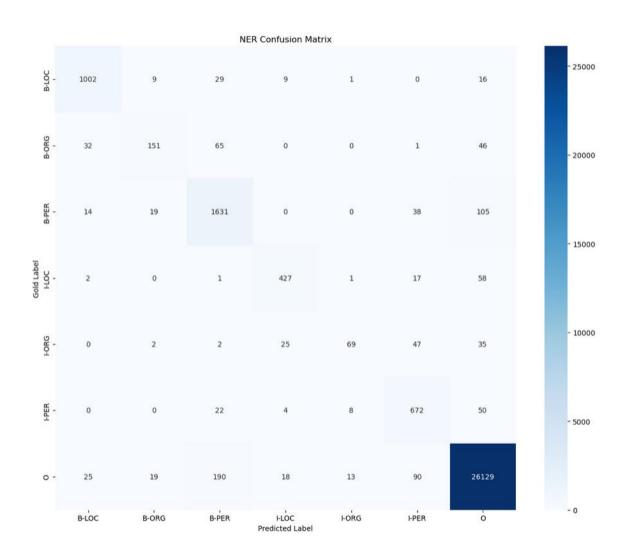
unlabeled

ul_recall: 0.904957372908115 ul_precision: 0.8917237087741132 ul_slot-f1: 0.8982918037925091

loose (partial overlap with same label)

I_recall: 0.8901168298073887
I_precision: 0.8755444928438083
I_slot-f1: 0.8827705271985561

Mistake breakdown: Correct 30081 Wrong_label 348 Missed 310 Spurious 355 B-ORG->B-PER 65 I-ORG->I-PER 47 B-PER->I-PER 38 B-ORG->B-LOC 32 B-LOC->B-PER 29 I-ORG->I-LOC 25 I-PER->B-PER 22 B-PER->B-ORG 19 I-LOC->I-PER 17 B-PER->B-LOC 14 B-LOC->I-LOC 9 B-LOC->B-ORG 9 I-PER->I-ORG 8 I-PER->I-LOC 4 I-LOC->B-LOC I-ORG->B-PER I-ORG->B-ORG 2 B-LOC->I-ORG I-LOC->I-ORG 1 B-ORG->I-PER I-LOC->B-PER 1



EWT (DAPT) + rap/hip-hop

trained on: en ewt-ud-train.iob2 + en ewt-ud-dev.iob2 + rap-hip-hop-manual-1000-train.iob2

tested on: lyrics_test.iob2

recall: 0.8711714556362489 precision: 0.8335347432024169 slot-f1: 0.8519376254438784

unlabeled

ul_recall: 0.9216924534259552 ul_precision: 0.8818731117824773 ul_slot-f1: 0.9013432144511347

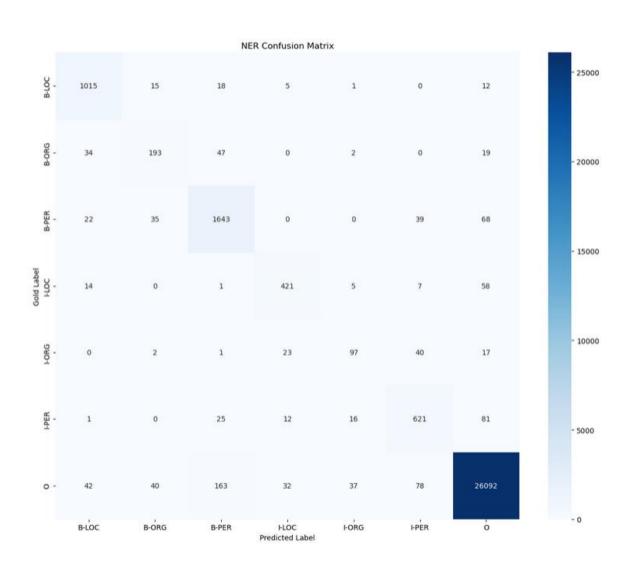
loose (partial overlap with same label)

I_recall: 0.9172718661193558 I_precision: 0.8824773413897281 I_slot-f1: 0.8995382627393301

Mistake breakdown:

Correct 30082 Wrong_label 365 Missed 255 Spurious 392 B-ORG->B-PER 47 I-ORG->I-PER 40 B-PER->I-PER B-PER->B-ORG 35 B-ORG->B-LOC 34 I-PER->B-PER 25 I-ORG->I-LOC 23 B-PER->B-LOC 22 B-LOC->B-PER 18 I-PER->I-ORG 16 B-LOC->B-ORG 15 I-LOC->B-LOC 14 I-PER->I-LOC 12 I-LOC->I-PER 7 B-LOC->I-LOC 5 I-LOC->I-ORG 5 B-ORG->I-ORG 2 I-ORG->B-ORG 2 B-LOC->I-ORG 1 I-PER->B-LOC 1 I-LOC->B-PER 1

I-ORG->B-PER 1



EWT (DAPT) + rap/hip-hop (cont.)

trained on: en_ewt-ud-train.iob2 + en_ewt-ud-dev.iob2 + rap-hip-hop-manual-1000-train.iob2 + rap-hip-

hop_labeled_no_2000.iob2 **tested on:** lyrics_test.iob2

recall: 0.8746447742342911

precision: 0.8429701765063907 slot-f1: 0.8585154191848752

unlabeled

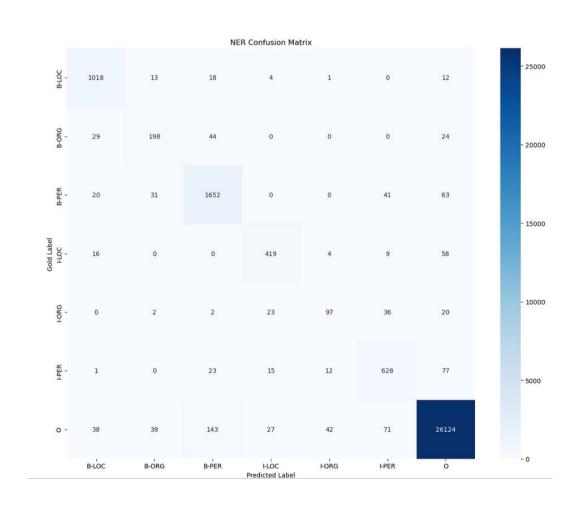
ul_recall: 0.9210609409535838 ul_precision: 0.8877054169202678 ul_slot-f1: 0.9040756237408957

loose (partial overlap with same label)

I_recall: 0.9204294284812125
I_precision: 0.8919659160073037
I_slot-f1: 0.9059741637407696

Mistake breakdown:

30136 Correct Wrong_label :344 Missed 254 Spurious 360 B-ORG->B-PER 44 B-PER->I-PER 41 I-ORG->I-PER B-PER->B-ORG 31 B-ORG->B-LOC 29 I-ORG->I-LOC 23 I-PER->B-PER 23 B-PER->B-LOC 20 B-LOC->B-PER 18 I-LOC->B-LOC 16 I-PER->I-LOC 15 B-LOC->B-ORG 13 I-PER->I-ORG 12 I-LOC->I-PER 9 B-LOC->I-LOC 4 I-LOC->I-ORG 4 I-ORG->B-PER 2 I-ORG->B-ORG 2 B-LOC->I-ORG 1 I-PER->B-LOC 1



EWT (DAPT) + all genres

trained on: en_ewt-ud-train.iob2 + en_ewt-ud-dev.iob2 + pop-manual-1000-train.iob2 + country-manual-1000-train.iob2 + rap-hip-hop-manual-1000-train.iob2

tested on: lyrics test.iob2

recall: 0.8853804862646037

precision: 0.8640986132511557

slot-f1: 0.8746101060511541

unlabeled

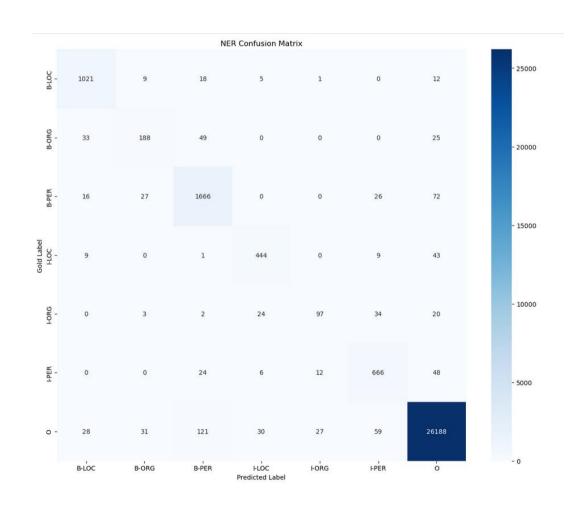
ul_recall: 0.9305336280391537 ul_precision: 0.9081664098613251 ul_slot-f1: 0.9192139737991265

loose (partial overlap with same label)

I_recall: 0.9210609409535838
I_precision: 0.8983050847457628
I_slot-f1: 0.9095407025656412

Mistake breakdown:

Correct 30270 Wrong_label 308 Missed 220 **Spurious** 296 B-ORG->B-PER 49 I-ORG->I-PER 34 B-ORG->B-LOC 33 B-PER->B-ORG 27 B-PER->I-PER 26 I-PER->B-PER 24 I-ORG->I-LOC 24 B-LOC->B-PER 18 B-PER->B-LOC 16 I-PER->I-ORG 12 I-LOC->B-LOC 9 B-LOC->B-ORG 9 I-LOC->I-PER 9 I-PER->I-LOC B-LOC->I-LOC I-ORG->B-ORG 3 I-ORG->B-PER B-LOC->I-ORG I-LOC->B-PER 1



EWT (DAPT) + all genres (cont.)

trained on: en_ewt-ud-train.iob2 + en_ewt-ud-dev.iob2 + pop-manual-1000-train.iob2 + pop_labeled_no_2000.iob2 + country-manual-1000-train.iob2 + country_labeled_no_2000.iob2 + rap-hip-hop-manual-1000-train.iob2 + rap-hip-hop-manual

hop_labeled_no_2000.iob2 **tested on:** lyrics_test.iob2

recall: 0.8828544363751184

precision: 0.8667079975201488 slot-f1: 0.8747067104645706

unlabeled

ul_recall: 0.9251657720239975 ul_precision: 0.9082455052696838 ul_slot-f1: 0.9166275613952761

loose (partial overlap with same label)

I_recall: 0.9216924534259552
I_precision: 0.9070055796652201
I_slot-f1: 0.9142900389951772

Mistake breakdown:

30260 Correct Wrong label 309 Missed 221 **Spurious** 304 B-ORG->B-PER 44 I-ORG->I-PER 35 B-ORG->B-LOC 30 B-PER->I-PER 29 I-ORG->I-LOC 28 B-PER->B-ORG 24 I-PER->B-PER 21 B-LOC->B-PER 18 B-PER->B-LOC 15 I-LOC->B-LOC 13 B-LOC->B-ORG 13 I-LOC->I-PER 10 I-PER->I-ORG 10 I-PER->I-LOC 7 I-ORG->B-ORG 4 B-LOC->I-LOC I-ORG->B-PER 2 B-PER->I-ORG 2 I-LOC->B-PER 1

