Supplementary Material for “Incorporating World Knowledge to Document Clustering via Heterogeneous Information Networks”

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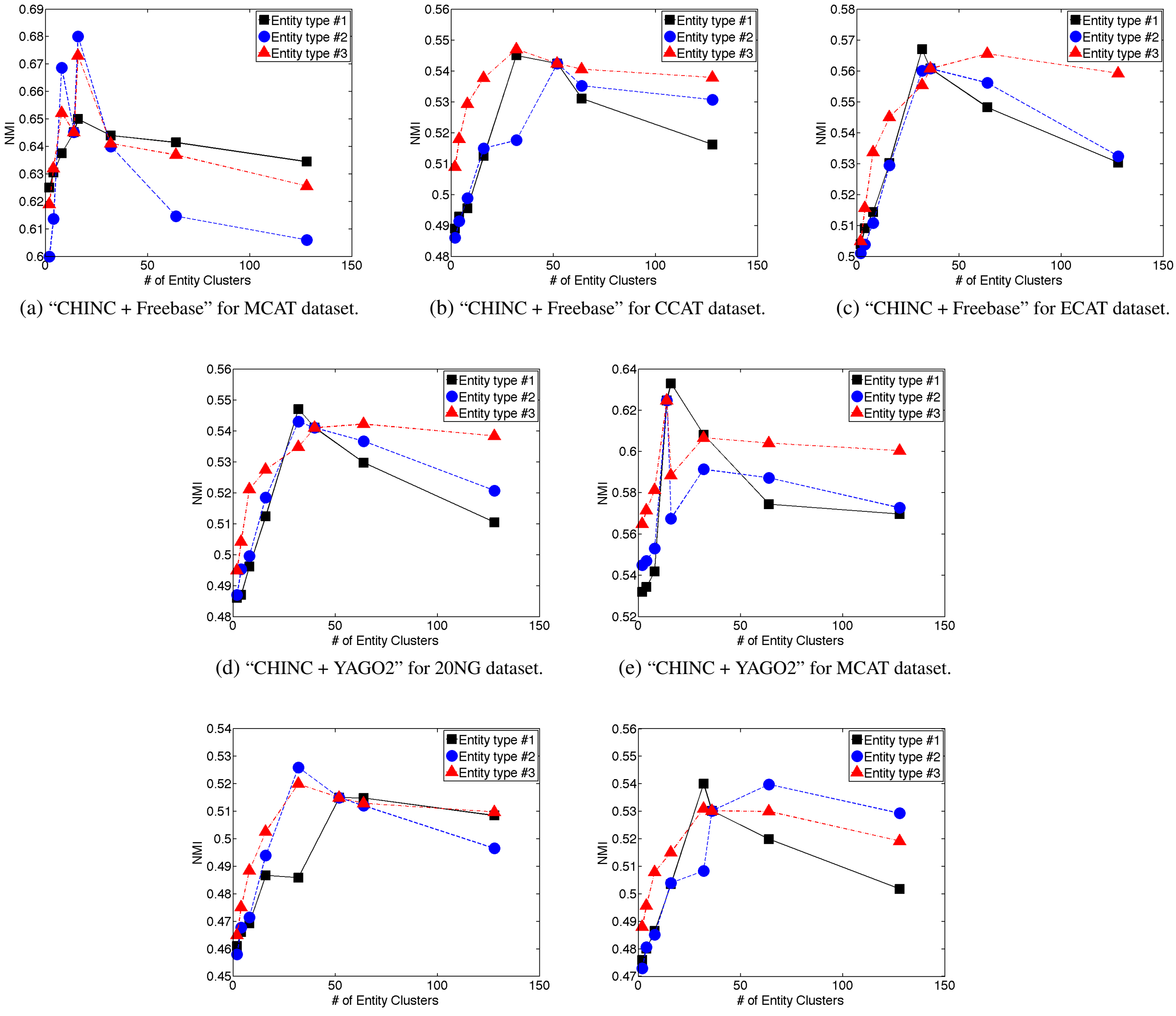
1. ADDITIONAL EXPERIMENTS



(a) “CHINC + Freebase” for MCAT dataset.

(b) “CHINC + Freebase” for CCAT dataset.

(c) “CHINC + Freebase” for ECAT dataset.

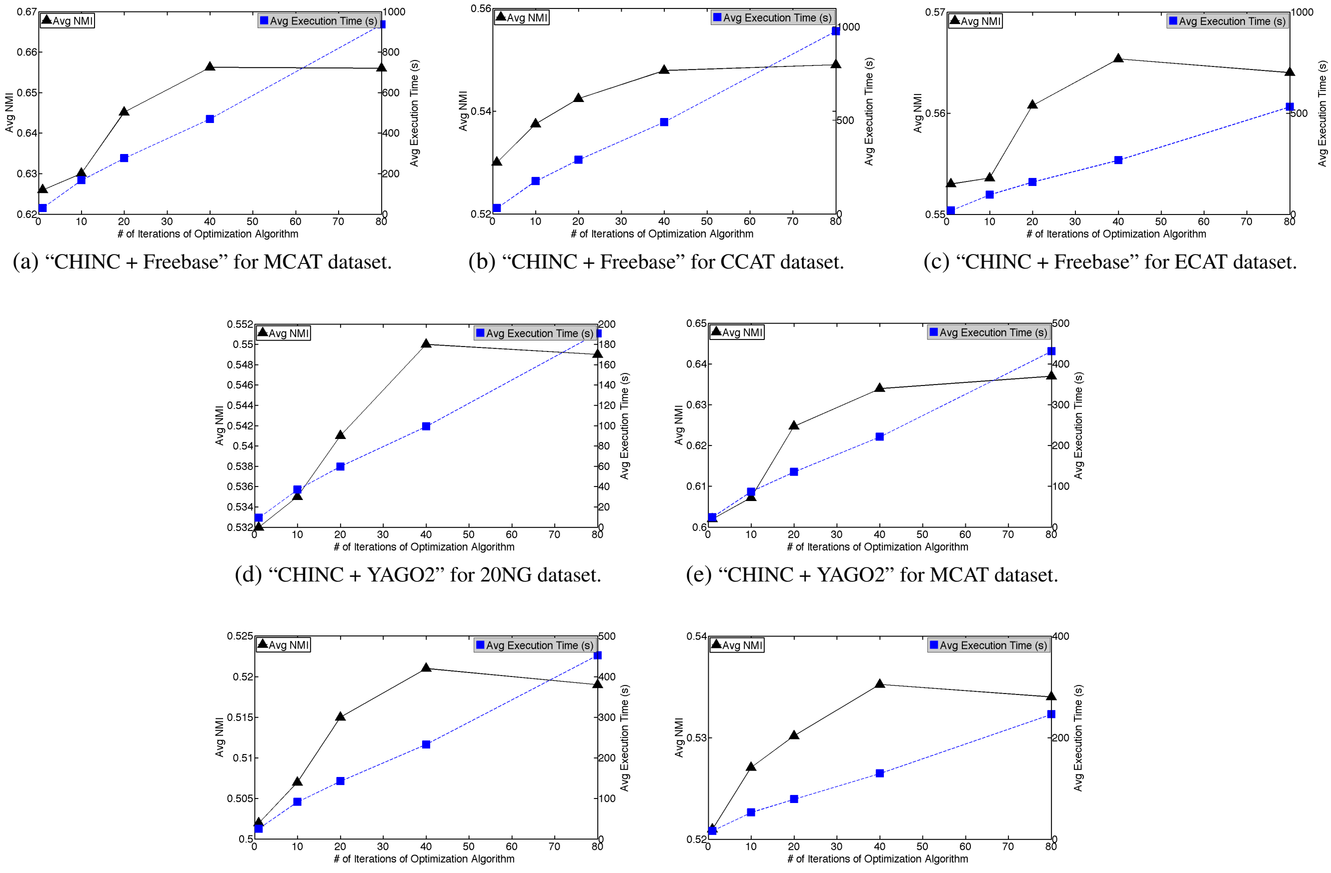
(d) “CHINC + YAGO2” for 20NG dataset.

(e) “CHINC + YAGO2” for MCAT dataset.

(f) “CHINC + YAGO2” for CCAT dataset.

(g) “CHINC + YAGO2” for ECAT dataset.

Figure 1: Effect of number of entity clusters of each entity type on document clustering on different dataset and world knowledge source combinations.



(a) “CHINC + Freebase” for MCAT dataset.

(b) “CHINC + Freebase” for CCAT dataset.

(c) “CHINC + Freebase” for ECAT dataset.

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(e) “CHINC + YAGO2” for MCAT dataset.

(f) “CHINC + YAGO2” for CCAT dataset.

(g) “CHINC + YAGO2” for ECAT dataset.

Figure 2: Analysis of # of iterations in alternating optimization algorithm on different dataset and world knowledge source combinations. Left y-axis: average NMI; Right y-axis: average execution time (s).