

The project is the implementation and optimization of this algorithm

(Top-N Recommendation through Belief Propagation, Ha et al., CIKM 2012):

<https://dl.acm.org/doi/pdf/10.1145/2396761.2398636>

One team mentioned concern with the correctness (not proven or disproven yet). A similar algorithm to use as alternative would be:

(BPRS: Belief Propagation Based Iterative Recommender System, Ayday et al., 2012)

<https://arxiv.org/pdf/1209.5335.pdf>

The initial implementation (starting point) can be done with the libDAI library:

<https://staff.fnwi.uva.nl/j.m.mooij/libDAI/>