

Full Model:

1. GlobalVec+RobertaTiny
top_k=2,
thresh=thresh_full-0.07
threshold_reader=0.6
para = 0.6458985571710081
qa=0.6362719419258788
data=5% all themes
hardware=cpu
2. GlobalVec(Improved Embeddings)+RobertaTiny+Ranker(Tiny Bert) (Ram Overflow 2
cores used + data leak)
top_k=15
top_k_ranker=2
thresh=thresh_full-0.05
threshold_reader=0.075
para =0.742513878558783
qa=0.7139960368581451
data=25% all themes
hardware=cpu
3. GlobalVec+RobertaTiny
top_k=3
thresh=thresh_full-0.07
threshold_reader=0.5
para = 0.6954258812917128
qa=0.6815802420683021
data=5% all themes
hardware=cpu
4. GlobalVec+RobertaTiny
top_k=1
thresh=thresh_full-0.07
threshold_reader=0.5
para = 0.6741059191921305
qa=0.6602505412157016
data=5% all themes
hardware=cpu

5. GlobalVec+RobertaTiny
top_k=4
thresh=thresh_full-0.07
threshold_reader=0.5
para = 0.6966179499535827
qa=0.682502088894094
data=5% all themes
hardware=cpu
6. GlobalVec+RobertaTiny
top_k=3
thresh=thresh_full-0.1
threshold_reader=0.5
para =0.6952249977722628
qa=0.6813788914167123
data=5% all themes
hardware=cpu
7. GlobalVec+RobertaTiny
top_k=1
thresh=thresh_full-0.05
threshold_reader=0.5
para = 0.6741059191921305
qa=0.6602505412157016
data=5% all themes
hardware=cpu
8. GlobalVec+RobertaTiny
top_k=2
thresh=thresh_full-0.07
threshold_reader=0.35
para =0.6741059191921305
qa=0.6602505412157016
data=5% all themes
hardware=cpu
9. GlobalVec+RobertaTiny
top_k=3
thresh=thresh_full-0.07
threshold_reader=0.7
para =running
qa=running

- data=5% all themes
hardware=cpu
10. GlobalVec+RobertaTiny
top_k=3
thresh=thresh_full-0.05
threshold_reader=0.35
para =0.7288286794196733
qa=0.7085380036597979
data=5% all themes
hardware=cpu
11. GlobalVec+RobertaTiny
top_k=3
thresh=thresh_full-0.07
threshold_reader=0.5
para =0.6449920677622732
qa= 0.6377547338601838
data=25% all themes
hardware=cpu
12. GlobalVec+RobertaTiny
top_k=3
thresh=thresh_full-0.05
threshold_reader=0.70
para =0.6103100576131645
qa=0.6033115170397494
data=5% all themes
hardware=cpu
13. Doc2Vec+RobertaTiny
top_k=2
thresh=theme_wise
threshold_reader=0.5
para =0.560000171905769
qa=0.548977507267844
data=5% all themes
hardware=cpu

14. GlobalVec+RobertaTiny
top_k=3
thresh=thresh_full-0.05
threshold_reader=0.35
para =0.6756364053960021
qa= 0.6627984347580687
data=25% all themes
hardware=cpu
15. GlobalVec+RobertaTiny
top_k=2
thresh=thresh_full-0.07
threshold_reader=0.35
para =0.6663509523201652
qa=0.6535314683276136
data=25% all themes
hardware=cpu
16. GlobalVec+RobertaTiny
top_k=2
thresh=thresh_full-0.05
threshold_reader=0.25
para =0.6779530305262029
qa=0.6617842747997061
data=25% all themes
hardware=cpu
17. GlobalVec+RobertaTiny
top_k=2
thresh=thresh_full-0.05
threshold_reader=0.15
para =0.6837325670323752
qa=0.6647719761362754
data=25% all themes
hardware=cpu

18. GlobalVec+RobertaTiny
top_k=3
thresh=thresh_full-0.05
threshold_reader=0.15
para =0.6912187026004518
qa=0.6719628223676353
data=25% all themes
hardware=cpu
19. GlobalVec+RobertaTiny
top_k=3
thresh=thresh_full-0.05
threshold_reader=0.25
para =0.6895109246338008
qa=0.6731015987217104
data=25% all themes
hardware=cpu
20. GlobalVec+RobertaTiny+Ranker(Tiny Bert)
top_k=15
top_k_ranker=3
thresh=thresh_full-0.05
threshold_reader=0.15
para =0.7249659889034914
qa=0.7037043425858692
data=25% all themes
hardware=cpu
21. GlobalVec+RobertaTiny+Ranker(Tiny Bert)
top_k=15
top_k_ranker=2
thresh=thresh_full-0.05
threshold_reader=0.15
para =0.7290986607175562
qa=0.7058415069921505
data=25% all themes
hardware=cpu

22. GlobalVec+RobertaTiny+Ranker(Tiny Bert)
top_k=15
top_k_ranker=1
thresh=thresh_full-0.05
threshold_reader=0.15
para =0.7279487872119916
qa=0.7032868320919099
data=25% all themes
hardware=cpu
23. GlobalVec+RobertaTiny+Ranker(Tiny Bert)
top_k=15
top_k_ranker=2
thresh=thresh_full-0.05
threshold_reader=0.075
para =0.7330864221765446
qa=0.707534178678867
data=25% all themes
hardware=cpu
24. GlobalVec+RobertaTiny+Ranker(Tiny Bert)
top_k=15
top_k_ranker=2
thresh=thresh_full-0.05
threshold_reader=0.25
para =running
qa=running
data=25% all themes
hardware=cpu
25. GlobalVec+RobertaTiny+Ranker(MiniLM-L-4-v2t)
top_k=15
top_k_ranker=2
thresh=thresh_full-0.05
threshold_reader=0.15
para =0.694558242416869
qa=0.6721711816124057
data=25% all themes
hardware=cpu

26. GlobalVec+RobertaTiny+Ranker(MiniLM-L-4-v2t)

top_k=15
top_k_ranker=2
thresh=thresh_full-0.05
threshold_reader=0.075
para =0.7276721305155048
qa=0.7020098095542826
data=25% all themes
hardware=cpu

27. GlobalVec+RobertaTiny+Ranker(Tiny Bert)

top_k=30
top_k_ranker=2
thresh=thresh_full-0.05
threshold_reader=0.075
para =0.7327034714509845
qa=0.7071457673663232
data=25% all themes
hardware=cpu

28. GlobalVec+RobertaTiny+Ranker(Tiny Bert)

top_k=10
top_k_ranker=2
thresh=thresh_full-0.05
threshold_reader=0.075
para =0.729279853884327
qa=0.704221899469189
data=25% all themes
hardware=cpu

29. GlobalVec+RobertaTiny+Ranker(Tiny Bert)

top_k=20
top_k_ranker=2
thresh=thresh_full-0.05
threshold_reader=0.075
para =0.7330142055686361
qa=0.7075152690473565
data=25% all themes
hardware=cpu

30. GlobalVec+RobertaTiny+Ranker(Tiny Bert)
top_k=15
top_k_ranker=2
thresh=thresh_full-0.1
threshold_reader=0.075
para =0.7330864221765446
qa=0.707534178678867
data=25% all themes
hardware=cpu
31. GlobalVec+RobertaTiny+Ranker(Tiny Bert)
top_k=15
top_k_ranker=2
thresh=thresh_full-0.25
threshold_reader=0.075
para =0.7317864444653837
qa=0.7062656017674773
data=25% all themes
hardware=cpu
32. GlobalVec+RobertaTiny+Ranker(Tiny Bert)
top_k=15
top_k_ranker=2
thresh=thresh_full-0.15
threshold_reader=0.075
para =0.7330864221765446
qa=0.707534178678867
data=25% all themes
hardware=cpu
33. GlobalVec+RobertaTiny+Ranker(Tiny Bert)
top_k=15
top_k_ranker=2
thresh=thresh_full-0.15
threshold_reader=0.025
para =0.7338431256479413
qa=0.7065891223565033
data=25% all themes
hardware=cpu

34. GlobalVec+RobertaTiny+Ranker(Tiny Bert)

top_k=15
top_k_ranker=2
thresh=theme_wise-0.07
threshold_reader=0.025
para =0.7418304567695047
qa=0.7152848985321273
data=25% all themes
hardware=cpu

35. GlobalVec+RobertaTiny+Ranker(Tiny Bert)+ImprovedEmbedding

top_k=15
top_k_ranker=2
thresh=theme_wise-0.07
threshold_reader=0.025
para =0.5227635023157647
qa=0.512949116363979
data=25%(of 25% data) all themes
hardware=cpu

Colab Inference Models:

1. GlobalVec+RobertaTiny+Ranker(Tiny Bert)

top_k=10
top_k_ranker=2
thresh=thresh_full-0.05
threshold_reader=0.075
para =0.7334359687280833
qa=0.7061938993463653
data=25% all themes
hardware=cpu

2. GlobalVec+RobertaTiny+Ranker(Tiny Bert)

top_k=10
top_k_ranker=1
thresh=thresh_full-0.05
threshold_reader=0.075
para =0.7295122442917081

qa=0.703007943999591
data=25% all themes
hardware=cpu

Semi Model:

1. Doc2Vec+ RobertaTiny
top_k= 2
thresh_retriever= thresh_semi having separate thresholds for separate themes
threshold reader= 0.6
para= 0.40652079993854573
qa= 0.40326583124108345
data= 5% all themes
hardware = CPU

Retriever :

//Update here

Reader:

//Update here