



Conversational Agent with RAG for Research Assistance

Team: Optimus Prime

Team members: Marko Medved, Matej Vrečar & Sebastijan Trojer

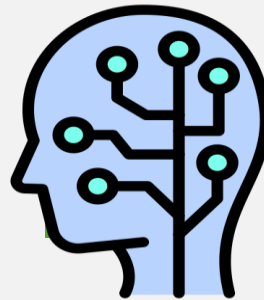
PROJECT GOALS



Research assistance

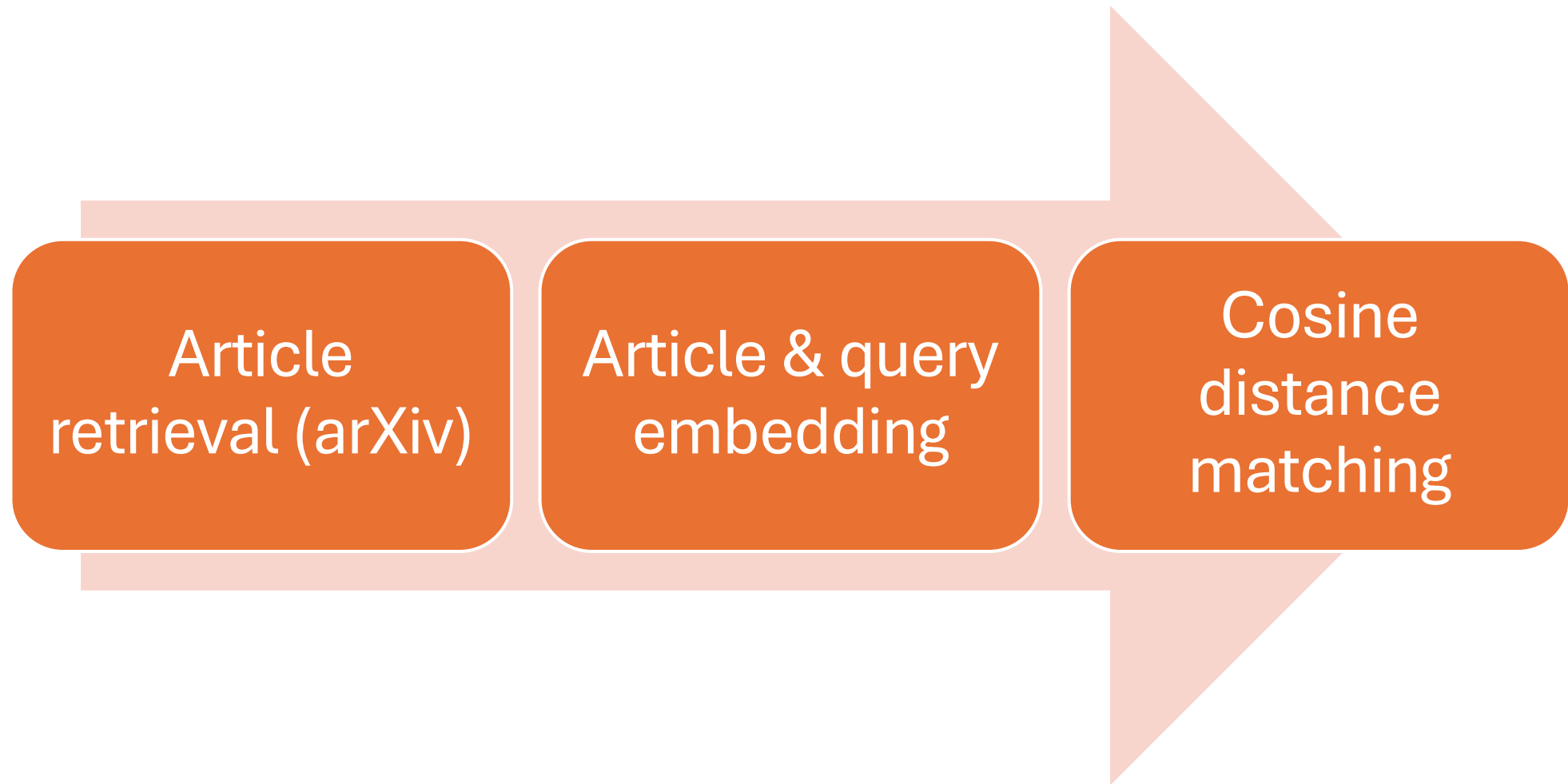


Relevant context retrieval

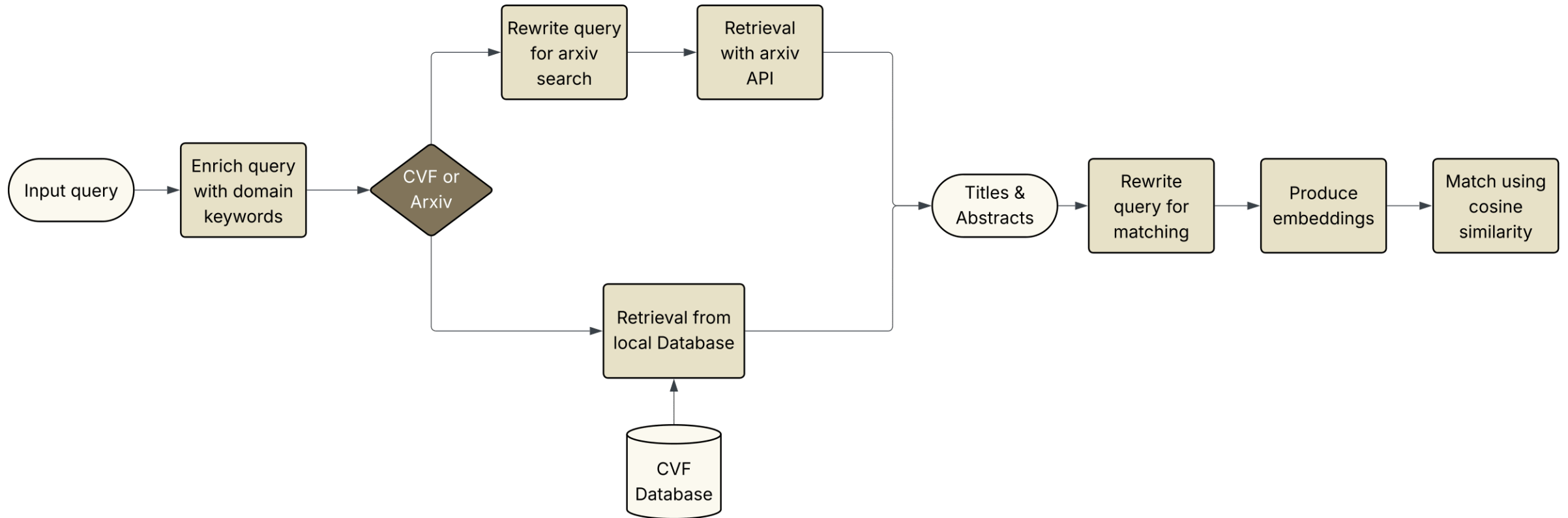


Better model reasoning

Baseline implementation



Improved pipeline



Results

Table 1. Retrieval performance for specific and broad queries

Specific Queries		
Method	MRR	nDCG
Current	0.361 ± 0.096	1.155 ± 0.272
Baseline	0.683 ± 0.090	2.056 ± 0.237
Broad Queries		
Method	MRR	nDCG
Current	0.236 ± 0.085	0.778 ± 0.244
Baseline	0.369 ± 0.078	1.309 ± 0.214