

Architectural Capabilities Comparison Matrix
Graph-RAG Provides Unique Combination of High Accuracy and Formal Guarantees

Accuracy

Baseline LLM

Fine-Tuning
(Factual)

Fine-Tuning
(Abstention)

RAG
(Embedding)

Graph-RAG
(Oracle)

50.1%

8.5%

8.6%

89.5%

89.1%

High Factual
Accuracy
(>80%)

Deterministic
Abstention

Formal
Validation

Interpretable
Provenance

Domain
Transfer

Zero
Retraining

