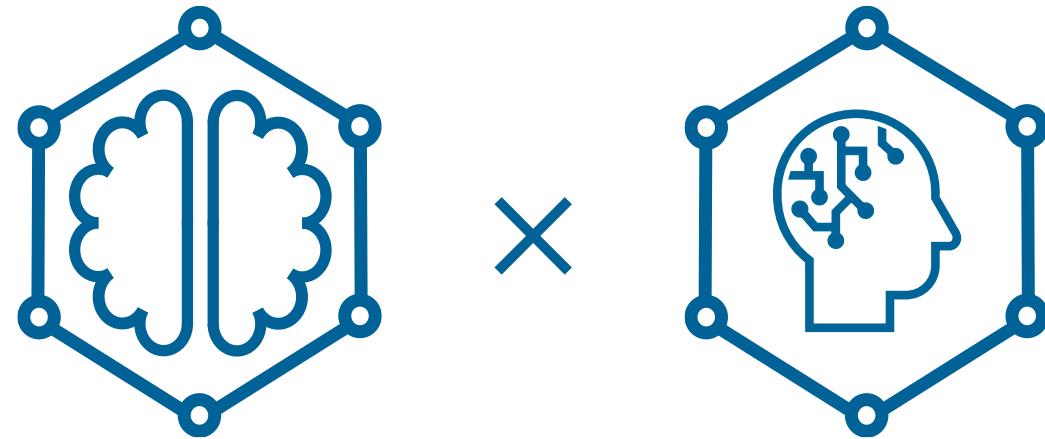




Knowledge Graphs



Generative AI



Knowledge Graphs × Large Language Models

Emanuel Sallinger



Knowledge Graphs (KGs)

Cons:

- Implicit Knowledge
- Hallucination
- Indecisiveness
- Black-box
- Lacking Domain-specific/New Knowledge

Pros:

- Structural Knowledge
- Accuracy
- Decisiveness
- Interpretability
- Domain-specific Knowledge
- Evolving Knowledge

Pros:

- General Knowledge
- Language Processing
- Generalizability

Cons:

- Incompleteness
- Lacking Language Understanding
- Unseen Facts

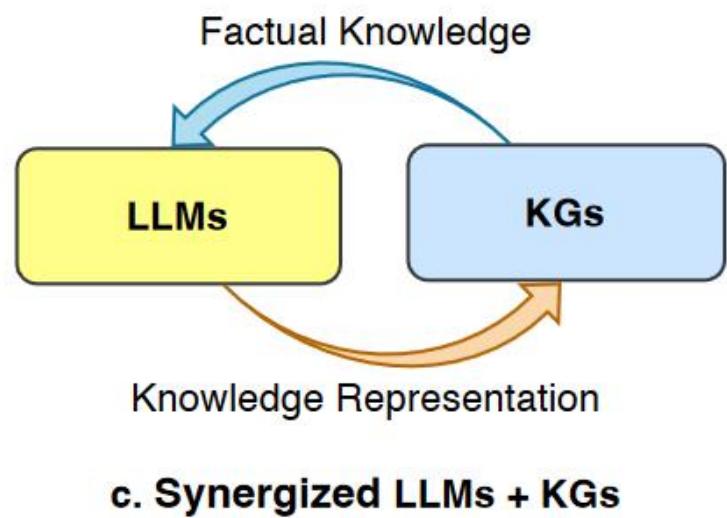
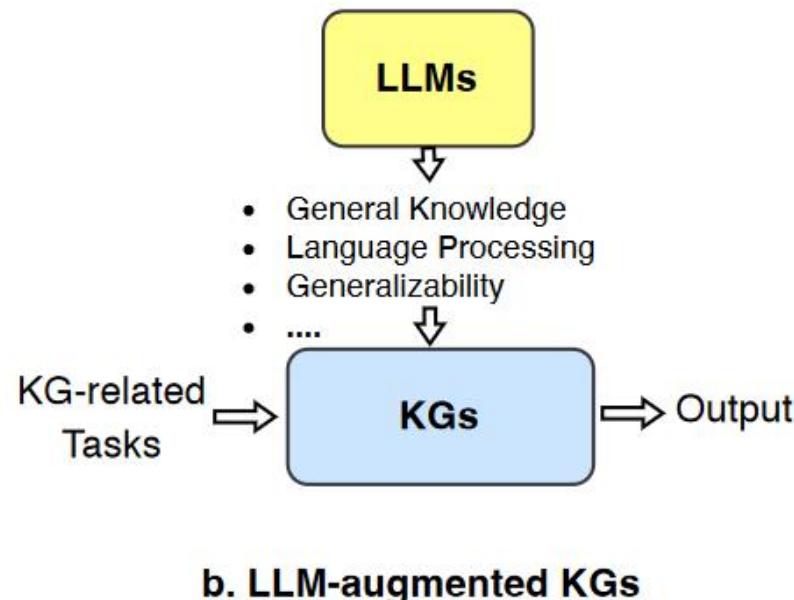
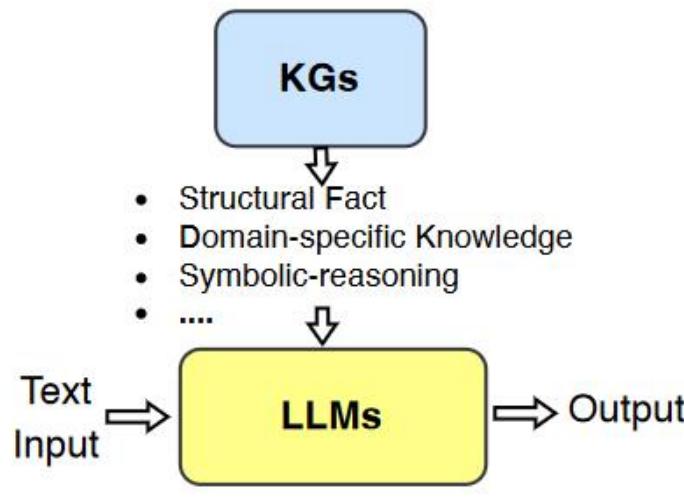
Large Language Models (LLMs)



Knowledge Graphs



Generative AI

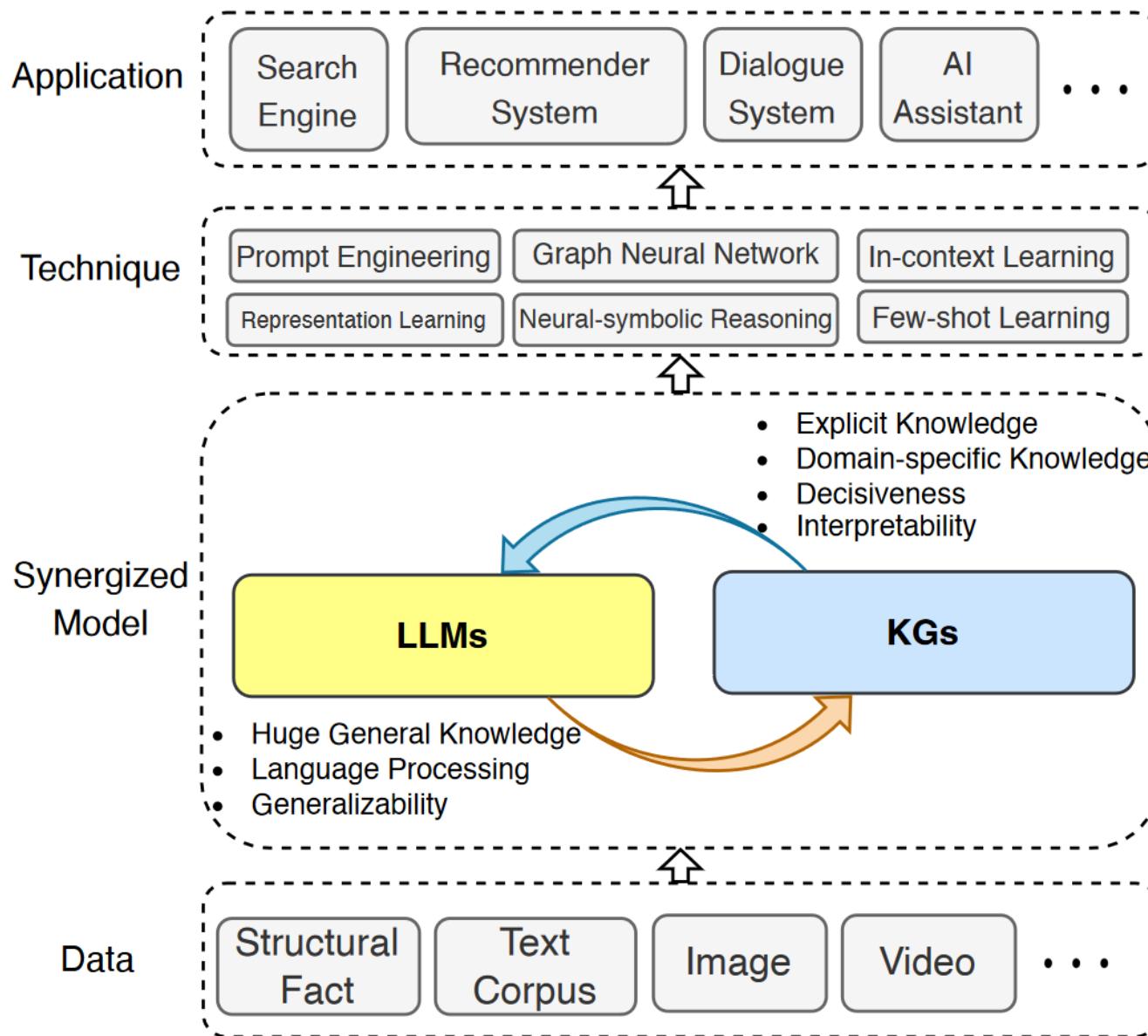




Knowledge Graphs



Generative AI





Knowledge Graphs



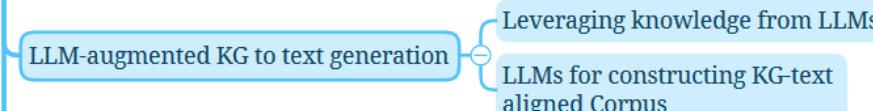
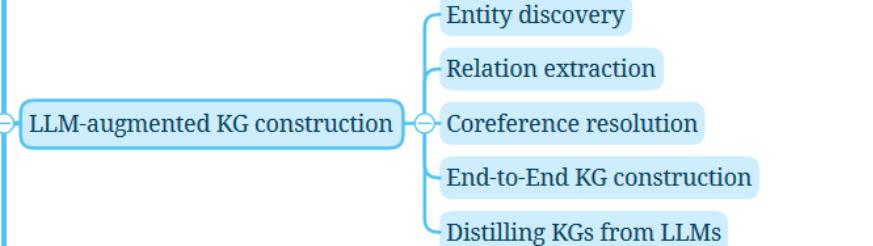
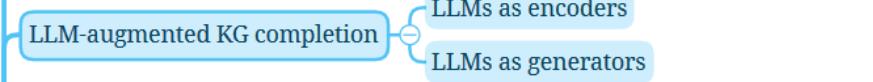
Generative AI

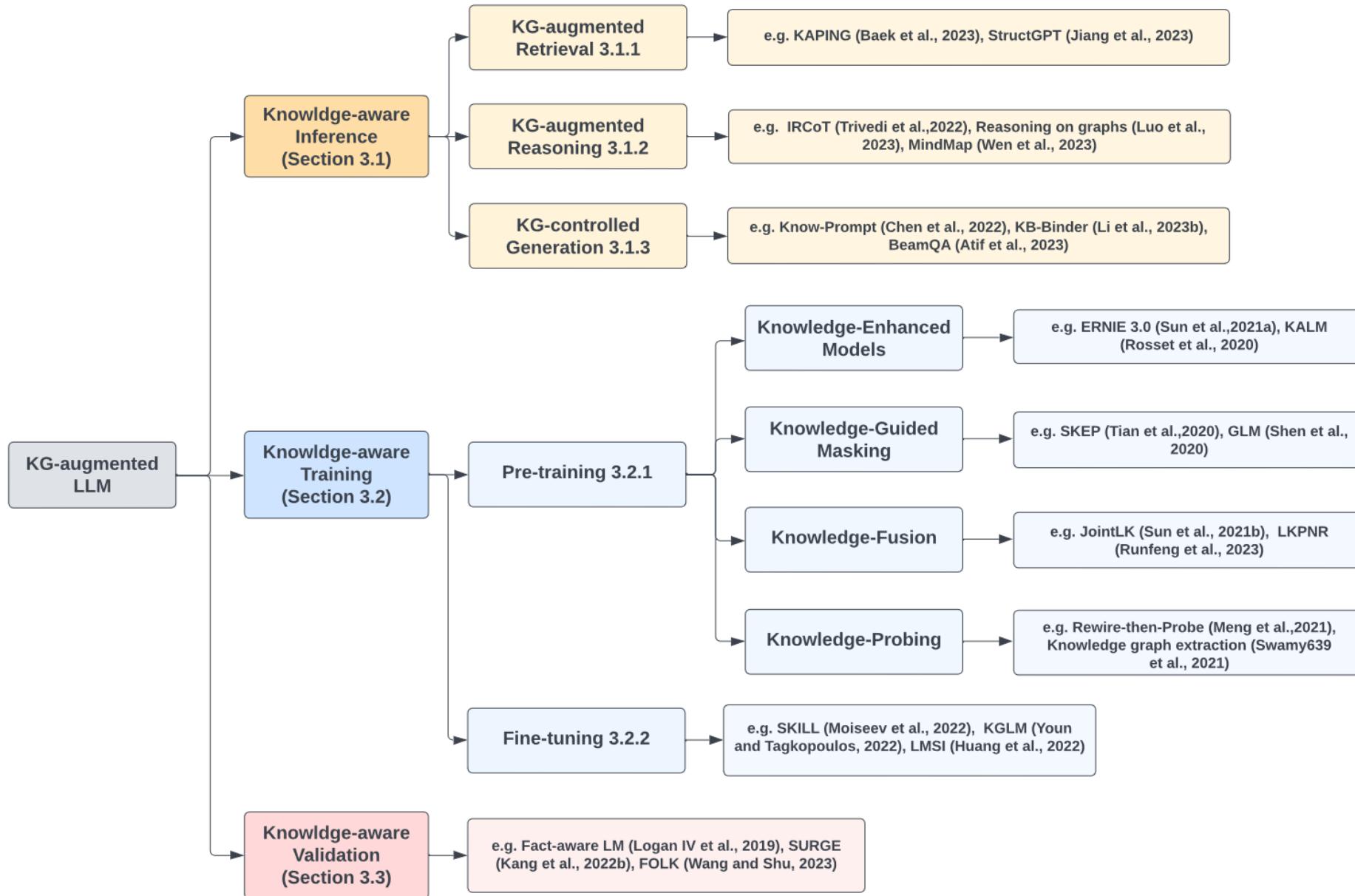
LLMs Meet KGs

LLM-augmented KGs

Synergized LLMs + KGs

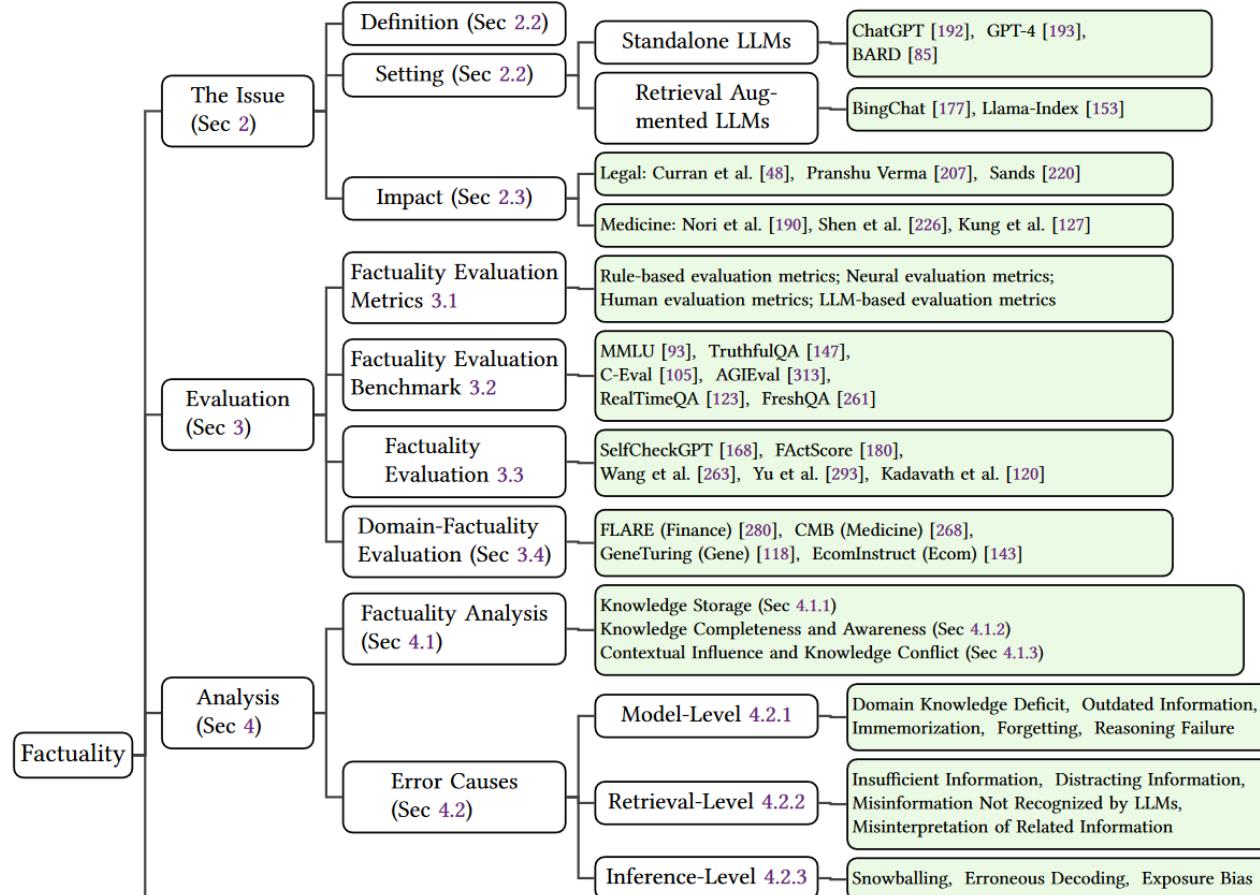
KG-enhanced LLMs





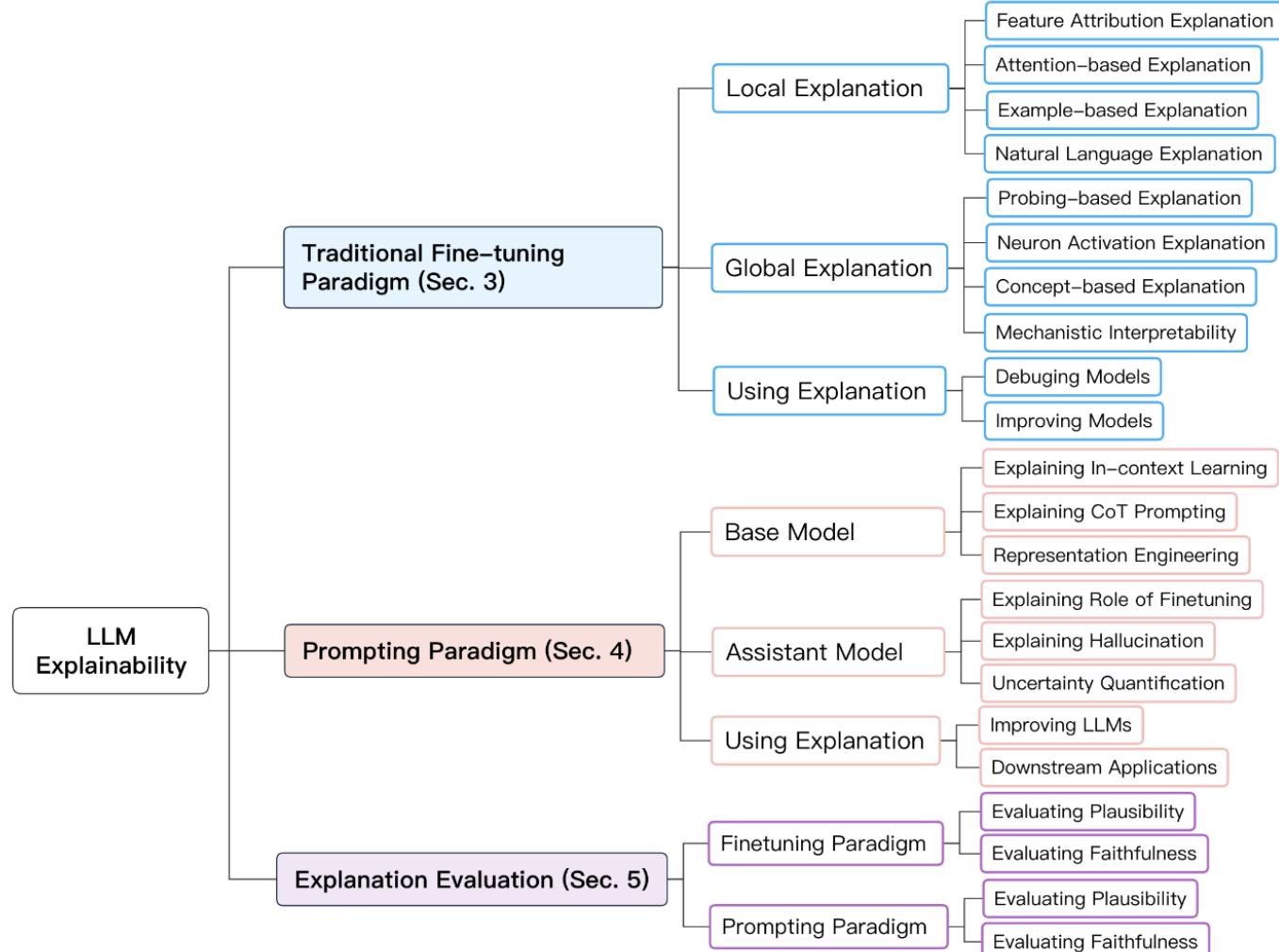


Factuality





Explainability

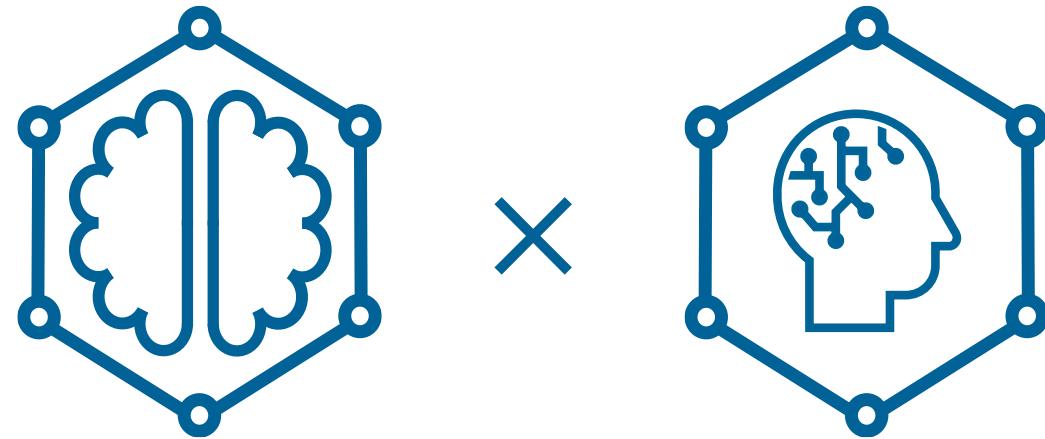




Knowledge Graphs



Generative AI



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