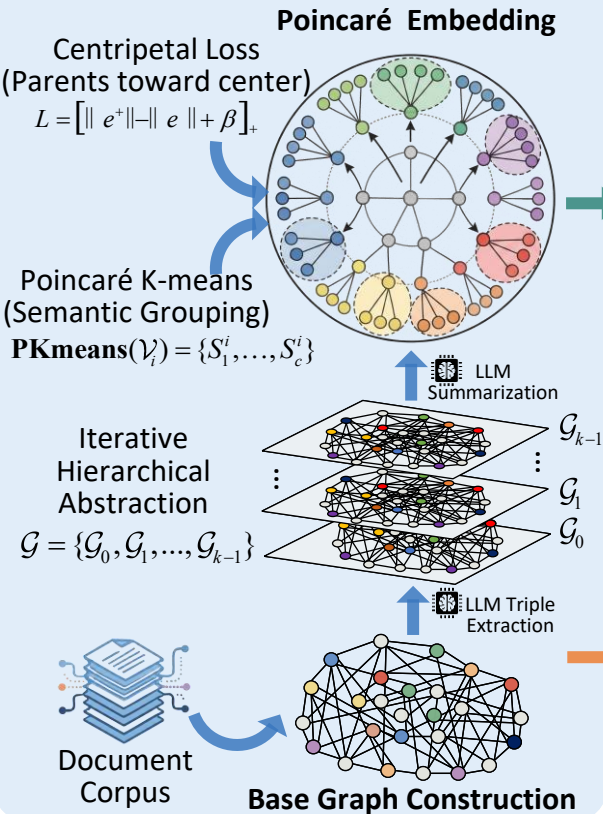
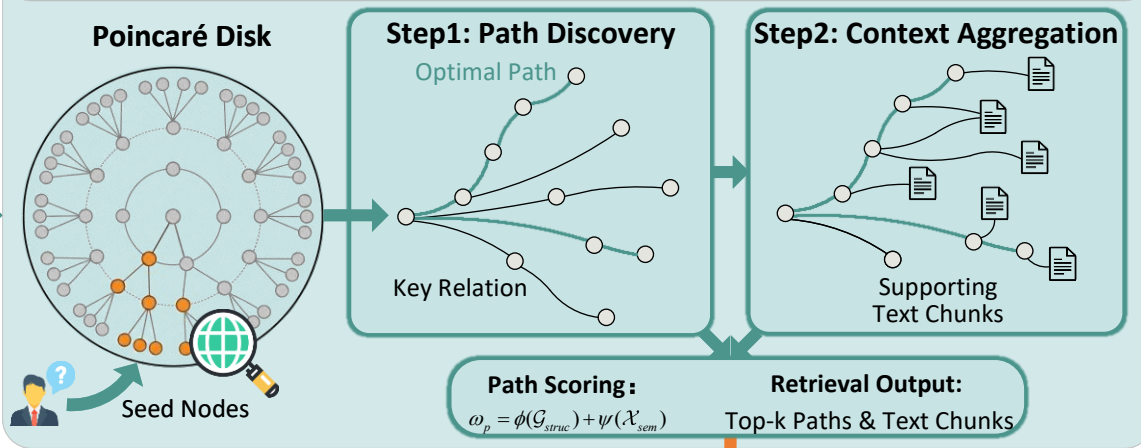


## (A) Poincaré Hierarchical Index



## (B) Geometry-aware Retrieval



## (C) LLM Reasoning & Generation

