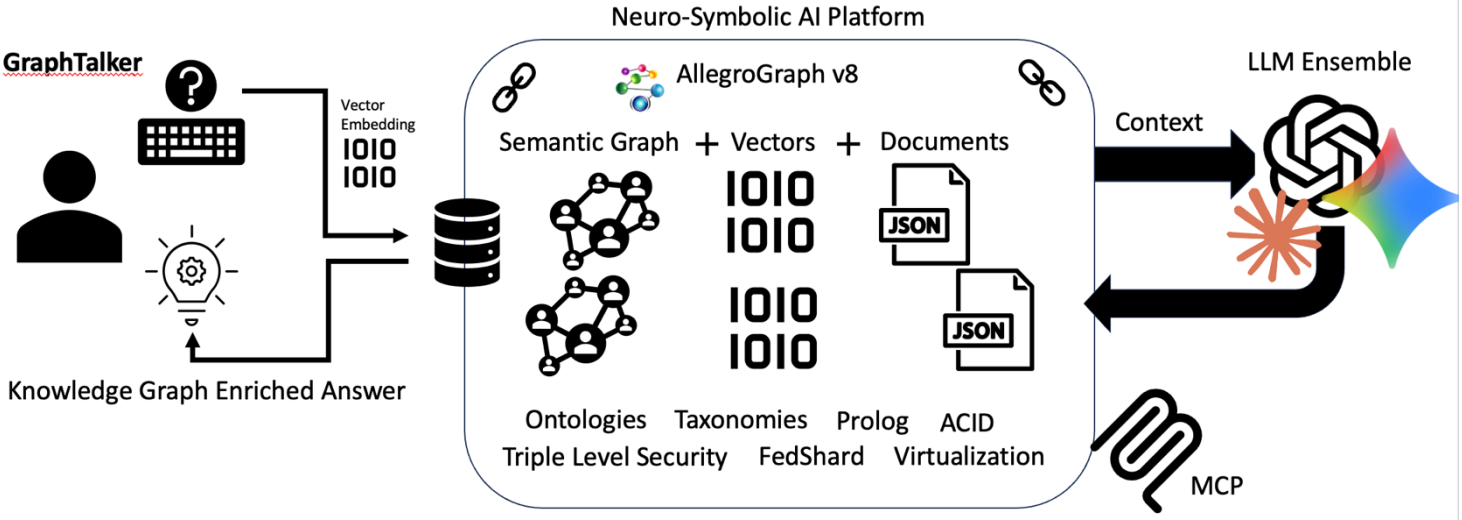
AllegroGraph®

"The Neuro-Symbolic Agentic Platform"

AllegroGraph is a distributed, multi-modal Graph (RDF), Vector, and Document (JSON, JSON-LD) database that includes LLMs, SPARQL, Geospatial, Temporal, Social Networking, and Text Analytics capabilities for horizontally scalable Knowledge Graphs. AllegroGraph provides the foundational structure for scalable Enterprise Knowledge Graphs for Neuro-Symbolic AI applications.

AllegroGraph is the first multi-modal Graph, Vector, LLM, and Document database to offer a Neuro-Symbolic AI Platform. AllegroGraph combines Machine Learning (statistical AI) with knowledge and reasoning (symbolic AI) capabilities. This powerful combination enables AllegroGraph to solve complex problems that require reasoning and learn efficiently with less data, thereby expanding applicability across a broad array of tasks. The blending of machine learning and reasoning in AllegroGraph also produces decisions that are understandable to humans and explainable, an important step in the progression of AI.



Features

- GraphTalker – MCP based natural-language layer for agents
- MCP Integration
- RAG via Knowledge Graph (Retrieval Augmented Generation)
- Vector Generation and Storage – ACID and Secure
- Horizontally distributed (sharded) graph and document database for horizontal scaling
- Triple Attributes – Quads/Triples can now have attributes which can provide "Cell Level" access control.
- Native JSON and JSON-LD storage
- Data Science – Anaconda, R Studio
- 100% ACID - Transactions: Commit, Rollback, and Checkpointing along with Multi-Master Replication.
- 3D and multi-dimensional geospatial functionality
- SHACL, SPARQL v1.1, RDFS++, OWL2-RL
- Temporal, Social Networking Analytics, Prolog Rules
- JavaScript stored procedures
- AGWebView – Visual Graph Search, Query Interface, and DB Management
- Advanced Auditing Support
- Visualizations – No-Code Graphical Query Builder for SPARQL and Prolog – Gruff

Architecture