Franz's Gruff 9 Brings LLM Integration and RDF* Semantics to Neuro-Symbolic AI Applications

Cutting-edge Knowledge Graph Visualization Tool Delivers No-code Queries, Hypergraphs and Dynamic Graph Displays

Gruff - Knowledge Graph Browser

LAFAYETTE, CALIFORNIA, USA, February 5, 2024 /EINPresswire.com/ -- Franz Inc., an early innovator in Artificial Intelligence (AI) and leading supplier of Knowledge Graph technology for Neuro-Symbolic AI applications, today announced Gruff 9, a web-based advanced Knowledge Graph visualization tool that offers LLM integration and unique RDF* (RDFStar) features for building next-generation AI applications.

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>
> *Dr. Jans Aasman, CEO, Franz Inc.*

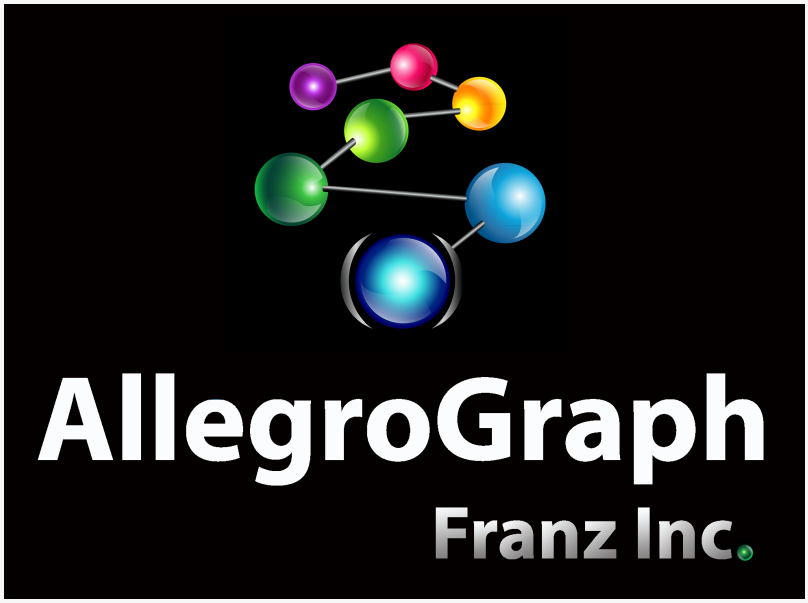
Gruff 9 provides users the ability to embed natural language LLM queries in SPARQL and visualize and explore the connections displayed in the results. Gruff now provides a unique visualization solution for the emerging RDF* standard from W3C. The RDF* standard is an improvement over the labeled property graph approach (supported by other vendors) as it allows full hypergraph capabilities.

Gruff 9 is included with AllegroGraph Cloud, Franz's hosted version of its groundbreaking Neuro-Symbolic AI platform. Gruff and AllegroGraph Cloud offers users a convenient and easy on-ramp to building advanced AI applications.

"The ability to visualize data has become essential to every organization, in every industry," said Dr. Jans Aasman, CEO of Franz Inc. "Gruff's dynamic data visualizations enable a broad set of users to determine insights that would otherwise elude them by displaying data in a way that they can see the significance of the information relative to a business problem or solution. Gruff makes it simple to weave these knowledge graph visualizations into new Neuro-Symbolic AI

applications – further extending the power of AI in the enterprise."

Franz Inc. recently announced AllegroGraph 8, its groundbreaking Neuro-Symbolic AI Platform that incorporates Large Language Model (LLM) components directly into SPARQL along with vector generation and vector storage for a comprehensive AI Knowledge Graph solution. AllegroGraph v8 redefines how Knowledge Graphs are created and expands the boundaries of what AI can achieve within the most secure triplestore database on the market.



AllegroGraph - Franz Inc.

Leading analyst firms recognize the compelling synergy between Knowledge Graphs and LLMs. "Data and analytics leaders must leverage the power of large language models (LLMs) with the robustness of knowledge graphs for fault-tolerant AI applications," advises Gartner in a June 9, 2023 report titled: AI Design Patterns for Knowledge Graphs and Generative AI.

"Knowledge graphs provide the perfect complement to LLM-based solutions where high thresholds of accuracy and correctness need to be attained," said Radu Miclaus, Senior Director, Gartner. (Source: Gartner Report, AI Design Patterns for Knowledge Graphs and Generative AI, June 9, 2023)

As the first Neuro-Symbolic AI Platform, AllegroGraph 8 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 8 also produces decisions that are understandable to humans and explainable, an important step in the progression of AI.

The advancements in AllegroGraph 8 encompass the following transformative capabilities and enhancements.

Retrieval Augmented Generation (RAG) for LLMs - AllegroGraph guides Generative AI content through RAG, feeding LLMs with the 'source of truth.' This innovative approach helps avoid 'hallucinations' by grounding the output in fact-based knowledge. As a result, organizations can confidently apply these insights to critical decision-making processes, secure in the knowledge that the information is both reliable and trustworthy.

Natural Language Queries and Reasoning - The new LLMagic functions within AllegroGraph 8 serve as the bridge between human language and machine understanding, offering a dynamic natural language interface for both querying and reasoning processes. Users can now engage with AllegroGraph 8 in a manner that closely mirrors human conversation, making AI capabilities accessible to a broader set of users and increasing productivity for current users.

Enterprise Document Deep-insight - New VectorStore capabilities within AllegroGraph 8 offer a seamless bridge between enterprise documents and Knowledge Graphs. This unique feature empowers users to access a wealth of knowledge hidden within documents, allowing users to query content that was previously considered 'dark data.' Users gain a comprehensive view of enterprise data, contributing to the business's deeper insights from its proprietary data. One unique feature of AllegroGraph's vector store implementation is that it lives under the same security framework that we apply to the graphs. AllegroGraph's 'triple-attributes' mechanism puts security 'in' the data elements itself. AllegroGraph offers the ability to annotate individual triples or text fragments and thus provides the most granular access method of any Graph-Vector platform.

AI Symbolic Rule Generation - AllegroGraph offers built-in rule-based system capabilities tailored for symbolic reasoning. This unique feature distills complex data into actionable, interpretable rules. AI symbolic rule generation enables predictions or classifications based on data and provides transparent explanations for their decisions by expressing them in symbolic rules, enhancing trust and interpretability in AI systems.

Streamlined Ontology and Taxonomy Creation – LLMagic can streamline the complex and often labor-intensive task of crafting ontologies and taxonomies for any topic. By analyzing diverse data, and identifying patterns, relationships, and semantic connections that underpin the subject matter, LLMagic can quickly generate structured hierarchies and classifications that form the foundation of ontologies and taxonomies. Users can more quickly create ontologies and taxonomies with a reduced need for manual intervention, accelerating the knowledge organization process and enhancing the quality and comprehensiveness of the created structures.

Enhanced Scalability and Performance – AllegroGraph 8 includes enhanced FedShard™ capabilities making the management of sharding more straightforward and user-friendly while reducing query response time and improving overall system performance.

AI and Knowledge Graph Leadership
AllegroGraph was recently named a 2024 Trend-Setting Product by Database Trends and Applications. .

Guff 9 and AllegroGraph Cloud Availability
AllegroGraph Cloud with Gruff 9 fully integrated is available at https://allegrograph.cloud or directly from Franz Inc.

Conference and Webinar Presentations
Join our Webinar - Exploring AllegroGraph 8 - Unleashing the Power of Neuro-Symbolic AI - Wednesday, February 7th at 10AM Pacific - https://allegrograph.com/webcasts/webinar-exploring-allegrograph-v8-unleashing-the-power-of-neuro-symbolic-ai/

About Franz, Inc.
Franz Inc. is an early innovator in Artificial Intelligence (AI) and a leading supplier of Graph Database technology with expert knowledge in developing and deploying Knowledge Graph solutions in combination with LLMs. AllegroGraph is utilized by dozens of the top Fortune 500 companies worldwide.

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