

# **AllegroGraph Named to KMWorld's 2023 Trend Setting Products**

## **AllegroGraph Powers LLMs to Deliver Fact-based AI Knowledge Graph Solutions for the Enterprise**

**Lafayette, Calif., September 26, 2023** – Franz Inc., an early innovator in Artificial Intelligence (AI) and leading supplier of Graph Database technology for Entity-Event Knowledge Graph Solutions, today announced it has been named a “2023 Trend Setting Product” by KMWorld.

AllegroGraph provides organizations with essential Knowledge Graph solutions, including Large Language Models (LLMs), Graph Neural Networks, Graph Virtualization, GraphQL, Apache Spark graph analytics, and Kafka streaming graph pipelines. These capabilities exemplify AllegroGraph's leadership in empowering data analytics professionals to derive business value out of Knowledge Graphs.

“Franz Inc. is continually innovating and we are honored to receive this acknowledgement for our efforts to deliver industry leading solutions,” said Dr. Jans Aasman, CEO, Franz Inc. “Organizations across a range of industries are realizing the critical role that Knowledge Graphs play in creating rich, yet flexible AI-driven applications. AllegroGraph with its patented FedShard™ technology uniquely provides companies with the foundational environment for delivering Graph based AI solutions with the ability to continually enrich and contextualize the understanding of data.”

### **LLMs and Knowledge Graphs**

Large language models (LLMs), such as ChatGPT, BARD, and Claude 2, are rapidly accelerating the field of natural

language processing and artificial intelligence. However, LLMs often fall short of delivering factual knowledge on a consistent basis and can create 'hallucinations' that generate text that is untrue. Knowledge Graphs provide a perfect complimentary offering of structured knowledge models which explicitly store rich factual knowledge and can enhance LLMs by providing grounded, fact-based knowledge.

Leading industry analysts recommend using LLMs in conjunction with Knowledge Graphs. "Data and analytics leaders must leverage the power of large language models (LLMs) with the robustness of knowledge graphs for fault-tolerant AI applications," said Gartner. (Source: Gartner Report, AI Design Patterns for Large Language Models, June 9, 2023)

AllegroGraph is designed to easily integrate with LLMs and provide the most secure and scalable AI solution for the Enterprise.

### **Knowledge Graphs for Enterprise Data Lakehouses**

The emerging Data Lakehouse approach is bringing the best of Data Warehouses and Data Lakes in one simple platform to co-locate data across the enterprise for cost effective analytics and AI use cases. However, despite the promise of Data Lakehouses, they still leave much of the data unconnected and in native form which can require significant effort to unlock its full potential.

Industry analysts recognize the power of a Semantic Layer in delivering integrated, trusted, and real-time views of enterprise data. Knowledge Graphs excel at delivering a Semantic Layer which unifies business data with knowledge bases, industry terms, and domain knowledge.

By overlaying a Knowledge Graph onto a Lakehouse architecture, the combination facilitates more flexible data operations, lowers data integration costs, and delivers powerful insights only possible when data is connected. Adding a Knowledge Graph

to an enterprise Lakehouse enables organizations to explore and exploit unknown connections across data for richer analytics and enhanced Artificial Intelligence capabilities.

Franz's AllegroGraph platform further extends this Knowledge Graph and Lakehouse combination with a novel Entity-Event Model. This proven architecture puts core 'entities' such as customers, patients, students, or people of interest at the center and then collects several layers of knowledge related to the entity as "events" in temporal context. Adding Franz's Entity-Event Knowledge Graph to an enterprise Lakehouse delivers enhanced discovery, greatly reduced data complexity, and faster results – at scale.

### **Graph Neural Networks**

With AllegroGraph, users can create Graph Neural Networks (GNNs) and take advantage of a mature AI approach for Knowledge Graph enrichment via text processing for news classification, question and answer, search result organization, event prediction, and more. GNNs created in AllegroGraph enhance neural network methods by processing the graph data through rounds of message passing, as such, the nodes know more about their own features as well as neighbor nodes. This creates an even more accurate representation of the entire graph network. AllegroGraph GNNs advance text classification and relationship extraction for enhancing enterprise-wide Data Fabrics.

### **Visualizing Knowledge Graphs**

Gruff, which is available as a browser-based application or pre-integrated into AllegroGraph, is a no-code visual query application that enables users to create visual Knowledge Graphs that display data relationships in views driven by the user. Gruff's visual query builder empowers both novice and expert users to create simple to highly complex queries without writing any code. The unique 'Time Machine' function

within Gruff gives users the capability to explore temporal context and connections within data.

## **About Franz Inc.**

Franz Inc. is an early innovator in Artificial Intelligence (AI) and leading supplier of Graph Database technology with expert knowledge in developing and deploying Knowledge Graph solutions. The foundation for Knowledge Graphs and AI lies in the facets of semantic technology provided by AllegroGraph and Allegro CL. AllegroGraph enables businesses to extract sophisticated decision insights and predictive analytics from highly complex, distributed data that cannot be uncovered with conventional databases. Unlike traditional relational databases or other NoSQL databases, AllegroGraph employs semantic graph technologies that process data with contextual and conceptual intelligence. AllegroGraph is able to run queries of unprecedented complexity to support predictive analytics that help organizations make more informed, real-time decisions. AllegroGraph is utilized by dozens of the top Fortune 500 companies worldwide. To learn more about Franz and AllegroGraph, go to [franz.com](http://franz.com).