

# Franz Inc. to Present at The Global Graph Summit and Data Day Texas

Dr. Jans Aasman, CEO, Franz Inc., will be presenting, “Creating Explainable AI with Rules” at the Global Graph Summit, a part of Data Day Texas. The abstract for Dr. Aasman’s presentation:



Dr. Jans Aasman, CEO, Franz Inc.

*“There’s a fascinating dichotomy in artificial intelligence between statistics and rules, machine learning and expert systems. Newcomers to artificial intelligence (AI) regard machine learning as innately superior to brittle rules-based systems, while the history of this field reveals both rules and probabilistic learning are integral components of AI. This fact is perhaps nowhere truer than in establishing explainable AI, which is central to the long-term business value of AI front-office use cases.”*

*“The fundamental necessity for explainable AI spans regulatory compliance, fairness, transparency, ethics and lack of bias – although this is not a complete list. For example, the effectiveness of counteracting financial crimes and increasing revenues from advanced machine learning predictions in financial services could be greatly enhanced by deploying more accurate deep learning models. But all of this would be arduous to explain to regulators. Translating those results into explainable rules is the basis for more widespread AI deployments producing a more*

*meaningful impact on society.”*

The Global Graph Summit is an independently organized vendor-neutral conference, bringing leaders from every corner of the graph and linked-data community for sessions, workshops, and its well-known before and after parties. Originally launched in January 2011 as one of the first NoSQL / Big Data conferences, Data Day Texas each year highlights the latest tools, techniques, and projects in the data space, bringing speakers and attendees from around the world to enjoy the hospitality that is uniquely Austin. Since its inception, Data Day Texas has continually been the largest independent data-centric event held within 1000 miles of Texas.

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## **Earth Day – Franz Inc. and Geoscience Experts Recognize the Growing Importance of Semantic Knowledge Graphs for Earth Science**

***Semantically Linking Earth Observation Data Makes it FAIR for the Global Community of Geoscientists***

In celebration of Earth Day, Franz Inc., an early innovator in Artificial Intelligence (AI) and leading supplier of Semantic Graph Database technology for Knowledge Graphs, today recognized how AllegroGraph, its semantic knowledge graph technology, is playing an essential part in making data FAIR (Findable, Accessible, Interoperable and Reusable) for the geoscience community. Since the current understanding of earth

science processes is largely based on earth observation and numerical model data, making this data FAIR for all geoscientists and technologists is critical to facilitate future knowledge discovery about planet Earth.

Collecting, storing, monitoring and analyzing data from the core of the Earth up to the atmosphere provides critical knowledge about the planet and how living things interact with it. Scientists and technologists gather information about Earth from a range of sources, including: satellites, air- ground- and ocean-based sensors, physical sample data, etc., which are all recorded at a variety of temporal and spatial resolutions and need to be represented on the web for the global scientific community to access and use. AllegroGraph's unique semantic graph capabilities allow diverse and complex data sources to be easily integrated with full search and cross-dataset queries possible.

"Our most pressing global environmental challenges cannot be solved by a single organization," said Dr. Annie Burgess, Lab Director, Earth Science Information Partners (ESIP). "Scientists require data collected across multiple disciplines, which are often managed by many different agencies and institutions. ESIP is a community of data and information technology professionals dedicated to ensuring those data are FAIR. To assist with that goal, the unique semantic graph capabilities of AllegroGraph are

leveraged with the ESIP Community Ontology Repository, a community platform to manage and exchange terms and vocabularies that assists scientists to publish, discover and reuse data.”

“To address important marine research, there is a critical need for ocean observatories to share data in a way that is easy to discover, use and integrate,” said Carlos Rueda, Senior Software Engineer, Monterey Bay Aquarium Research Institute. “With this goal in mind, the Marine Metadata Interoperability Project developed the MMI Ontology Registry and Repository (ORR), which leverages AllegroGraph to provide powerful interoperable semantic services that make the content on the web interconnected in a meaningful way for both humans and machines to consume.”

“We are at an exciting stage where there is a critical mass of experts and organizations around the globe with similar goals as well as the realization that we need knowledge-intensive applications,” said Dr. Lewis McGibbney, Data Scientist, Jet Propulsion Laboratory, California Institute of Technology and Co-Chair of the NASA ESDSWG Search Relevance Working Group. “The semantic technology stack is a crucial piece for building intelligent apps for knowledge-intensive use cases within the geoscience area.”

“Semantic graph technology is particularly well-suited to address the complex data integration, data access and analysis challenges surrounding Earth data science,” said Dr. Jans Aasman, CEO of Franz Inc. “We are thrilled that leading geoscience organizations are tapping into the power of AllegroGraph to share Earth science ontologies and data. We look forward to continuing to work with the community and help forward their important projects.”

A recent Gartner report explains the importance of using semantic technology to drive value out of data and included AllegroGraph as a graph database to consider for semantic technology solutions.

“Unprecedented levels of data scale and distribution are making it almost impossible for organizations to effectively exploit their data assets. Data and analytics leaders must adopt a semantic approach to their enterprise data assets or face losing the battle for competitive advantage.”

(Source: *Gartner, How to Use Semantics to Drive the Business Value of Your Data, Guido De Simoni, November 27, 2018.*) To view a summary of the report, go to <https://www.gartner.com/doc/3894095/use-semantics-drive-business-value>.

## **About ESIP**

The Earth Science Information Partners (ESIP) is a community of innovative science, data and information technology practitioners. ESIP members catalyze connections across traditional institutional and domain boundaries to solve critical Earth

science data stewardship, information technology and interoperability issues. Through this work, ESIP improves Earth science data management practices and makes Earth science data more discoverable, accessible and useful to researchers, policy makers and the public. Learn more at [esipfed.org](http://esipfed.org) or follow @ESIPfed on Twitter.

### **About Monterey Bay Aquarium Research Institute**

Monterey Bay Aquarium Research Institute (MBARI) encompass the entire ocean, from the surface waters to the deep seafloor, and from the coastal zone to the open sea. The need to understand the ocean in all its complexity and variability drives MBARI's research and development efforts.

### **About JPL**

The Jet Propulsion Laboratory is a unique national research facility that carries out robotic space and Earth science missions. JPL helped open the Space Age by developing America's first Earth-orbiting science satellite, creating the first successful interplanetary spacecraft, and sending robotic missions to study all the planets in the solar system as well as asteroids, comets and Earth's moon. In addition to its missions, JPL developed and manages NASA's Deep Space Network, a worldwide system of antennas that communicates with interplanetary spacecraft. JPL is a federally funded research

and development center managed for NASA by Caltech. From the long history of leaders drawn from the university's faculty to joint programs and appointments, JPL's intellectual environment and identity are profoundly shaped by its role as part of Caltech.

## **About AllegroGraph**

AllegroGraph is a database technology that 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 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 F500 companies worldwide

## **Semantic Knowledge Graphs are the Foundation for Artificial Intelligence**

The foundation for Knowledge Graphs and AI lies in the facets of semantic technology provided by AllegroGraph. Semantic Graph databases provide the core technology environment to enrich and contextualized the understanding of data. The ability to rapidly integrate new

knowledge is the crux of the Knowledge Graph and depends entirely on semantic technologies.

### **About Franz Inc.**

Franz Inc. is an early innovator in Artificial Intelligence (AI) and leading supplier of Semantic 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. The ability to

rapidly integrate new knowledge is the crux of the Knowledge Graph and Franz

Inc. provides the key technologies and services to address your complex

challenges. Franz Inc. is your Knowledge Graph technology partner.

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# **What is the Answer to AI Model Risk Management?**

**Algorithm-XLab – March 2019**

**Franz CEO Dr. Jans Aasman Explains how to manage AI Modelling Risks.**



AI model risk management has moved to the forefront of contemporary concerns for statistical Artificial Intelligence, perhaps even displacing the notion of ethics in this regard because of the immediate, undesirable repercussions of tenuous machine learning and deep learning models.

AI model risk management requires taking steps to ensure that the models used in artificial applications produce results that are unbiased, equitable, and repeatable.



The objective is to ensure that given the same inputs, they produce the same outputs.

If organizations cannot prove how they got the results of AI risk models, or have results that are discriminatory, they are subject to regulatory scrutiny and penalties.

Strict regulations throughout the financial services industry in the United States and Europe require governing, validating, re-validating, and demonstrating the transparency of models for financial products.

There's a growing cry for these standards in other heavily regulated industries such as healthcare, while the burgeoning Fair, Accountable, Transparent movement typifies the horizontal demand to account for machine learning models' results.

AI model risk management is particularly critical in finance.

Financial organizations must be able to demonstrate how they derived the offering of any financial product or service for specific customers.

When deploying AI risk models for these purposes, they must ensure they can explain (to customers and regulators) the results that determined those offers.

**Read the full article at [Algorithm-XLab](#).**

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# Optimizing Fraud Management with AI Knowledge Graphs

From Global Banking and Finance Review – July 12, 2018

**This article discusses Knowledge Graphs for Anti-Money Laundering (AML), Suspicious Activity Reports (SAR), counterfeiting and social engineering falsities, as well as synthetic, first-party, and card-not-present fraud.**

*By compiling fraud-related data into an AI knowledge graph, risk management personnel can also triage those alerts for the right action at the right time. They also get the additive benefit of reusing this graph to decrease other risks for security, loans, or additional financial purposes.*

**Dr. Aasman goes on to note:**

*By incorporating AI, these threat maps yields a plethora of information for actually preventing fraud. Supervised learning methods can readily identify what events constitute fraud and which don't; many of these involve classic machine learning. Unsupervised learning capabilities are influential in determining normal user behavior then pinpointing anomalies contributing to fraud. Perhaps the most effective way AI underpins risk management knowledge graphs is in predicting the likelihood—and when—a specific fraud instance*

*will take place. Once organizations have data for customers, events, and fraud types over a length of time (which could be in as little as a month in the rapidly evolving financial crimes space), they can compute the co-occurrence between events and fraud types.*

Read the full article over at [Global Banking and Finance Review](#).



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**The marvels of an event-based**

# schema

Franz's CEO, Jans Aasman, recently wrote the following article for InfoWorld.



*When working with various data types at the speed of big data, this method is ideal for integrating and aggregating assorted information for the holistic value it provides.*

*The issue of schema—and what is frequently perceived as its inherent difficulties—is becoming more important every day. Organizations are increasingly encountering decentralized computing environments typified by semi-structured or unstructured external data of varying formats, often requiring integration with internal, structured data for immediate business value.*

**Read the Full Article**

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## **Making sense of big data: Data projects spur progress**

From Managed Healthcare Executive:

The Montefiore Medical Center in Bronx, New York, has partnered with Franz, Inc., Intel, Cloudera, and Cisco to transform statistical databases, such as spreadsheets, into interactive graph databases that can be used to make better

informed and predictive healthcare decisions.

Aasman “If you are in a hospital and have millions of patients, you will need to do analytics in many ways—for more personalized medicine, for predictive modeling, and for better business intelligence,” says Jans Aasman, PhD, CEO of Franz, Inc., which specializes in semantic web technologies. “This system allows you to get all the data together from these different silos for analytics.”

Semantic data lakes (SDLs) enable healthcare providers to use multiple types of data sets congruently to get a more comprehensive picture of population health trends, says Parsa Mirhaji MD, PhD, associate professor of Systems and Computational Biology and director of Clinical Research Informatics at the Albert Einstein College of Medicine and Montefiore Medical Center-Institute for Clinical Translational Research.

Read the full article.

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# **AllegroGraph Certification on Cloudera Enterprise Creates a Semantic Graph Data Platform for Hadoop**

*Leading Accountable Care Organization Gains Sophisticated Decision Insights from Complex, Distributed Big Data Using AllegroGraph and Cloudera Enterprise*

OAKLAND, Calif. – February 8, 2016 – Franz Inc., an early

innovator in Artificial Intelligence (AI) and leading supplier of Semantic Graph Database technology, today announced the availability of AllegroGraph 6, the leading Semantic Graph Database with certification on the latest release of Cloudera Enterprise through the Cloudera Certified Technology Program (CCPT). AllegroGraph is the first Semantic Graph Database to be certified on Cloudera Enterprise, the global provider of the fastest, easiest, and most secure data management and analytics platform built on Apache Hadoop and the latest open source technologies.

The combination of AllegroGraph and Cloudera Enterprise eases the integration of highly complex Big Data, including large public datasets, and enables real-time analytics across distributed data, while leveraging the world's highest performance and most cost effective storage. Enterprises can run queries of unprecedented complexity to enable predictive analytics and real time decision-making within a myriad of industries including Healthcare, Life Sciences, Financial Services, Intelligence/National Security and Publishing. The hardened platform can run mission-critical applications that require uncompromised data resiliency using features like ACID compliance to ensure data is never lost.

"As the availability of large public datasets continues to rise, many organizations are looking to leverage these datasets to enrich enterprise analytics," said Tim Stevens, vice president of Business and Corporate Development at Cloudera. "A semantic graph approach to data sets provides a viable method to gleaning additional insights from data."

"Today's Big Data challenge is also a Cognitive Computing challenge," said Dr. Jans Aasman, CEO of Franz Inc. "We need to combine unstructured data with structured data to fuel real-time analysis, predictive analytics and deep learning. But the ease of data integration largely depends on the type of database. With the Semantic flexibility of AllegroGraph, integrating databases is a virtually effortless, since the

data can remain in its original databases and database designers do not have to create a schema up front. This capability is particularly valuable if organizations want to tap into the growing number of public datasets to enrich their analytics.”

The powerful combination of AllegroGraph and Cloudera plays a critical role in the Semantic Data Lake for Healthcare, a collaboration between Montefiore Health System (The leading Accountable Care Organization in the U.S), Franz, Cloudera, Cisco and Intel to provide a scalable and extensible Big Data Analytic platform for Healthcare. The SDL for Healthcare is a shared vision between Montefiore Health System and Franz, for constructing longitudinally integrated, semantically enriched, scalable and secured analytics infrastructure necessary for next generation learning healthcare systems, and precision medicine. The SDL deploys Montefiore’s innovative informatics solutions on Franz’s AllegroGraph and Cloudera’s Hadoop distribution, and enables modelers, data scientists and application developers to leverage complex information, biomedical knowledge-bases and ontologies, as well as the linked open data (LOD) for predictive modeling, care management, population and community health management, health systems research, and clinical and translational research.

“The Semantic Data Lake for Healthcare will help us to connect the dots to better understand the determinants of outcome, cost, and patient satisfaction in a complex ecosystem in which patients and clinicians interact with each other, with the delivery of care system, and with the research enterprise,” said Dr. Parsa Mirhaji MD. PhD., Director of Clinical Research Informatics at Einstein College of Medicine and Montefiore Health System. “The problem is, there are billions of such dots that needs to be connected meaningfully, and reproducibly. The complexity is that there are many different principles, pathways, and theoretical frameworks on how those

dots would connect, and we just don't know which model or framework would yield the best answer. The SDL will enable us to address both the complexity, and scalability concerns efficiently, while maintaining a tight grasp on the semantic integrity and consistency of analysis over large, multi source, ever changing datasets."

Dr. Mirhaji added, "The SDL embodies Montefiore's incremental and measured approach towards Cognitive Computing in healthcare. Our ability to conduct real-time analysis over new combinations of data, to compare results across multiple analyses, and to engage patients, practitioners and researchers as equal partners in big-data analytics and decision support will fuel discoveries, significantly improve efficiencies, personalize care and ultimately save lives."

"Information has always existed everywhere but has often been isolated, incomplete, unavailable or unintelligible," according to Gartner. "Advances in semantic tools such as graph databases as well as other emerging data classification and information analysis techniques will bring meaning to the often chaotic deluge of information." (Source: Gartner Identifies the Top Strategic Technology Trends for 2016.)

AllegroGraph has been widely recognized and endorsed within the industry as the popularity of Graph databases has skyrocketed – growing nearly 500% in the past two years. In 2015 AllegroGraph was named a Leading Database Solution by CIOReview and awarded Best in Semantic Web Technology & Leader in Graph Database Products by Corporate America. This year, PharmaTech Outlook has named Franz a Top Ten Solution Provider.

"Franz has been leading the burgeoning Graph Database revolution with a highly sophisticated, yet elegant Semantic Graph database solution," said Harvi Sachar, Publisher & Founder, CIOReview. "Franz's AllegroGraph continues to break new ground in predictive analytics and visual graph discovery



capabilities- benefiting organizations around the globe within Healthcare, Intelligence/National Security, Life Sciences and Financial Services.”

## **About AllegroGraph**

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## **About Franz Inc.**

Franz Inc. is an early innovator in Artificial Intelligence (AI) and leading supplier of Semantic Graph Database technology with expert knowledge in developing and deploying complex Big Data analytics solutions. AllegroGraph, Franz’s flagship, high-performance, transactional, and scalable Semantic Graph Database, provides the solid storage layer for Enterprise grade NoSQL solutions. AllegroGraph’s Activity Recognition capabilities provides a powerful means to aggregate and analyze data about individual and organizational behaviors, preferences, relationships, plus spatial and temporal linkages between individuals and groups. For additional Franz Inc customer success stories please visit:

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Franz's Professional Service team is in the business of helping companies turn Data into Information and Information into Knowledge. We combine Data, Business Intelligence, and Analytics consulting services under one roof for our customers. Franz, an American owned company based in Oakland, California, is committed to market-driven product development, the highest levels of product quality and responsive customer support and service. Franz customers include dozens of Fortune 500 companies and span the healthcare, government, life sciences and telecommunications industries worldwide. Franz has demonstrated consistent growth and profitability since inception.

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# **AllegroGraph Recognized as Best in Semantic Web Technology – USA & Leader in Graph Database Products**

***Franz's AllegroGraph Fueling Rapid Growth in Graph Database Category***

**OAKLAND, Calif. – February 3, 2016** – Franz Inc., an early innovator in Artificial Intelligence (AI) and leading supplier of Semantic Graph Database technology has been recognized As “Best in Semantic Web Technology – USA & Leader in Graph Database Products” by Corporate America Software and Technology.

“At Corporate America, it’s our priority to showcase prominent professionals who are excelling in their industry and outperforming their competitors,” said Hannah Stevenson, Managing Group Editor, AI Global Media. “Franz Inc. have a reputation for innovation, utilizing their expert knowledge to create complex and exciting Graph Database solutions. Franz’s unique platforms offer highly scalable technologies for solving complex Big Data challenges.”

Corporate America is the definitive magazine for CEOs, top tier management and key decision makers across the US. Created to inform, influence, and shape the corporate conversation across the nation through high quality editorial, in-depth research and an experienced and dedicated network of advisers, Corporate America provides its readership with the most authoritative and current analysis of the major changes effecting the corporate landscape, and the latest deals and topical issues dominating the corporate universe. A multifaceted program, the awards are focused on rewarding excellence across all areas of the technology and software industries and all nominees are closely scrutinized to ensure that only the most deserving receive Corporate America’s prestigious awards.

“We are excited that Graph Databases, like AllegroGraph, have garnered the attention they deserve by Enterprise customers looking to innovate,” said Dr. Jans Aasman, CEO, Franz Inc. “In today’s data-driven environments, the ability to quickly analyze data from diverse sources is becoming critical. We are already seeing how Semantic Graph Databases with predictive analytics can help transform healthcare through Precision Medicine and make us safer through Insider Threat Detection.”

“Because it (AllegroGraph) is a Graph database, it can store pretty much any kind of data and query it, not just in the time-worn relational fashion, but also in a graphical manner – carving out graphical maps of relationships. And on top of that, it can apply semantics to deduce as-yet-undiscovered

knowledge from the data. Its capabilities are very broad, and they provide a glimpse of the shape of things to come,” added Bloor. stated Robin Bloor, co-founder and Chief Analyst of The Bloor Group.

“Information has always existed everywhere but has often been isolated, incomplete, unavailable or unintelligible,” according to Gartner. “Advances in semantic tools such as graph databases as well as other emerging data classification and information analysis techniques will bring meaning to the often chaotic deluge of information.” (Source: Gartner Identifies the Top Strategic Technology Trends for 2016.)

A recent Forrester Research report stated, “Graph databases are a powerful optimized technology that link billions of pieces of connected data to help create new sources of value for customers and increase operational agility for customer service. Because graph databases track connections among entities and offer links to get more detailed information, they are well-suited for scenarios in which relationships are important, such as cybersecurity, social network analysis, eCommerce recommendations, dependence analysis, and predictive analytics.” (Source: Forrester Research, Market Overview: Graph Databases, May 28, 2015)

Franz’s recent announcement of the first Semantic Data Lake (SDL) for Healthcare, which was created in collaboration with Montefiore Medical Center (the eighth largest hospital group in the U.S.), Intel, Cloudera and Cisco. The SDL for Healthcare is a scalable and extensible Healthcare platform designed for Accountable Care and Personalized Medicine initiatives. AllegroGraph has played a critical role in the Semantic Data Lake for Healthcare, by facilitating integration of complex information for basic science, clinical, population, community, environmental, behavioral and wellness research data to enable knowledge-based analytics, classification, pattern recognition, predictive modeling and simulations at scale.

## **About Corporate America**

Corporate America is more than just a magazine. Alongside our quarterly publication, we also produce a website that is regularly updated with the latest news, features, opinion and comment, again in conjunction with a host of top-level advisers, experts and businesspeople, and throughout the year, you'll also get your chance to participate in our highly regarded awards programs, designed to pay tribute to the finest firms and individuals on the American business landscape.

## **About AllegroGraph**

Unlike traditional relational databases or Property Graph 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 the first Graph Database to support analysis across N-dimensions – any conceivable measurement of an object, property or operation. AllegroGraph can analyze temporal (time) and geospatial (location) dimensions relative to any 'event,' such as a disease, drug interaction, genetic combination, biomarkers, observations, image or physical sensors. AllegroGraph is utilized by dozens of the top Fortune 500 companies worldwide.

## **About Franz Inc.**

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Recognition capabilities provides a powerful means to aggregate and analyze data about individual and organizational behaviors, preferences, relationships, plus spatial and temporal linkages between individuals and groups. For additional Franz Inc customer success stories please visit:

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# **Franz's Gruff Produces Dynamic Visual Discovery for Graph Analytics**

*Gruff and AllegroGraph Power Visual Graph Search and Visual Query Building for Banking, Healthcare, Pharma Discovery and Security Applications*

**OAKLAND, Calif. – November 2, 2015** – Franz Inc., an early innovator in Artificial Intelligence (AI) and leading supplier of Semantic Graph Database technology, today announced Gruff v6.0, the industry’s leading Graph Visualization software for exploring and discovering connections within data. Gruff provides novice users and graph experts the ability to visually build queries and visualize connections between data without writing code, which speeds discovery and enhances the ability to uncover hidden connections within data.

“Gruff allows for easy viewing of graph style data and provides an easy on-ramp for non-technical users to explore connections in their data,” said Dr. Jans Aasman, CEO of Franz Inc. “Users can easily create queries visually, without becoming a query language expert, which further empowers the business user for this technology. Power users also benefit by creating ever more detailed queries in order extract knowledge from their data.”

Gruff v6.0 produces dynamic data visualizations that organize connections between data in views that are driven by the user. This visual flexibility can instantly unveil new discoveries and knowledge that turn complex data into actionable business insights. Gruff was developed by Franz to address Graph Search in large data sets and empower users to intelligently explore graphs in multiple views including:

- Graphical View – See the shape and density of graph data
- Tabular view – Understand objects as a whole
- Outline view – Explore the often hierarchical nature of graphs
- Query view – Write Prolog or SPARQL queries
- Graphical Query Builder – Create queries visually via drag and drop

Franz was recently named by CIOReview as one of the Top 20 Most Promising Database Solutions providers, due in part to the unique discovery capabilities offered by the combination

of Gruff and AllegroGraph, Franz's Semantic Graph Database technology.

"Franz has been leading the burgeoning Graph Database revolution with a highly sophisticated, yet elegant Semantic Graph database solution," said Harvi Sachar, Publisher & Founder, CIO Review. "Franz's AllegroGraph continues to break new ground in predictive analytics and visual graph discovery capabilities- benefiting organizations around the globe within Healthcare, Intelligence/National Security, Life Sciences and Financial Services."

The popularity of Graph databases has skyrocketed – growing nearly 500% in the past two years, according to a ranking by DB-Engines. One reason for this growth is interest in using graph databases, rather than relational databases, to store master data. Graph databases offer a 360-degree view of master data and can answer questions about data relationships in real time, providing new, actionable insights from existing data.

A recent Dataversity article by Jelani Harper noted, "There is a considerable degree of complexity in MDM systems in a business climate impacted by Big Data, especially for systems centered on customer domains. Numerous external sources (including social media and various forms of sentiment analyses) considerably complicate key relationships for products and customers. The deployment of graph databases, such as Franz's AllegroGraph, with MDM can simplify these relationships by visually representing the way that different categories of an organization's core business-based on ontologies-relate to one another."

Gruff and AllegroGraph also play a pivotal role in the Semantic Data Lake for Healthcare. A collaboration with Franz Inc., Montefiore Medical Center (the eighth largest hospital in the U.S.), Intel, Cloudera and Cisco, to provide a scalable and extensible Healthcare platform designed for Accountable Care and Personalized Medicine initiatives.



“Making sense out of big data is a challenge, particularly in the healthcare industry where information comes from a variety of sources and in different forms including structured, unstructured, images, temporal, geo-location and signal data,” said Dr. Aasman, “With Gruff as part of the Semantic Data Lake platform, we can perform visual data exploration to discover new relationships between data that can save lives and improve care.”

Franz Inc. will host a Webcast on November 18th at 10AM PST, “Enriching the Property Graph with Relationship Objects,” which will demonstrate the power of Gruff and AllegroGraph for an online banking application, a fraud detection application for a European tax office, a machine learning application in healthcare and the CrunchBase investment database.

## **Gruff 6.0 Availability**

Gruff 6.0 is available as a free download from the AllegroGraph website. The product runs on Mac OSX, Windows, Linux and is offered as a standalone application or client-server for remote users.

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# AllegroGraph Named as Leading Database Solution by CIOReview

## *Graph Database Market Continues Explosive Growth*

**OAKLAND, Calif. – September 15, 2015** – Franz, Inc., the leading supplier of Semantic Graph Database technology has been named CIOReview Magazine's Top 20 Most Promising Database Technology Solution providers. The award comes on the heels of Franz's recent announcement of the first Semantic Data Lake (SDL) for Healthcare, which was created in collaboration with Montefiore Medical Center (the eighth largest hospital group in the U.S.), Intel, Cloudera and Cisco. The SDL for Healthcare is a scalable and extensible Healthcare platform designed for Accountable Care and Personalized Medicine initiatives.

"Franz has been leading the burgeoning Graph Database revolution with a highly sophisticated, yet elegant Semantic Graph database solution," said Harvi Sachar, Publisher & Founder, CIO Review. "Franz's AllegroGraph continues to break new ground in predictive analytics and visual graph discovery capabilities- benefiting organizations around the globe within Healthcare, Intelligence/National Security, Life Sciences and Financial Services. We're excited to include Franz as one of our 20 Most Promising Database Solution Providers."

CIOReview is a technology magazine that showcases enterprise solutions capable of redefining the business goals of enterprises. It is a neutral source of information for technology decision makers that constantly endeavors to identify "The Best" in a variety of areas important to the technology industry.

"Since our inception, we have always been in the business of

‘solving complexity’ through our Semantic Graph technologies,” said Dr. Jans Aasman, CEO, Franz Inc.. “From our origins in the Artificial Intelligence boom, through our advanced capabilities in Graph search and now as part of our Semantic Data Lake project, we provide powerful solution to complex challenges in the Enterprise.”

The popularity of Graph databases has skyrocketed – growing nearly 400% in the past two years, according to a DBMS ranking by DB-Engines.

A recent Forrester Research report stated, “Graph databases are a powerful optimized technology that link billions of pieces of connected data to help create new sources of value for customers and increase operational agility for customer service. Because graph databases track connections among entities and offer links to get more detailed information, they are well-suited for scenarios in which relationships are important, such as cybersecurity, social network analysis, eCommerce recommendations, dependence analysis, and predictive analytics.” (Source: Forrester Research, Market Overview: Graph Databases, May 28, 2015)

During the recent Smart Data Conference, Dr. Parsa Mirhaji MD. PhD., Montefiore Medical Center and Dr. Jans Aasman, CEO of Franz Inc., introduced the AllegroGraph powered Semantic Data Lake. The need for semantic consistency within Data Lakes is a driving force for the Semantic Data Lake Healthcare platform. Adding semantics to a Data Lake dramatically eases the transformation and integration of multi-source, heterogeneous unstructured and structured data including free text clinical narratives.

‘Data Lakes’ have become one of the most discussed information management approaches over the past few years. According to Gartner Research Director Nick Heudecker, “Data Lakes typically begin as ungoverned data stores. Meeting the needs of wider audiences require curated repositories with

governance, semantic consistency and access controls...”  
(Source: Press Release, Gartner Says Beware of the Data Lake Fallacy, July 28, 2014)

## **About AllegroGraph**

Unlike traditional relational databases or Property Graph 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 the first Graph Database to support analysis across N-dimensions – any conceivable measurement of an object, property or operation. For example, AllegroGraph can analyze temporal (time) and geospatial (location) dimensions relative to any ‘event,’ such as a disease, drug interaction, genetic combination, biomarkers, observations, image or physical sensors.

## **About Franz Inc.**

Franz Inc. is an innovative technology company with expert knowledge in developing and deploying Graph Search solutions. AllegroGraph, Franz’s flagship, high-performance, transactional, and scalable Graph Database, provides the solid storage layer for powerful Enterprise grade NoSQL solutions. AllegroGraph’s Activity Recognition capabilities provide a powerful means to aggregate and analyze data about individual and organizational behaviors, preferences, relationships, plus spatial and temporal linkages between individuals and groups.

For additional Franz Inc customer success stories please visit:

- AllegroGraph – <http://franz.com/agraph/success/>
- Allegro CL – <http://franz.com/success/>

Franz’s Professional Service team is in the business of

helping companies turn Data into Information and Information into Knowledge. We combine Data, Business Intelligence, and Analytics consulting services under one roof for our customers.

Franz, an American owned company based in Oakland, California, is committed to market-driven product development, the highest levels of product quality and responsive customer support and service. Franz customers include Fortune 500 companies in the government, life sciences and telecommunications industries. Franz has demonstrated consistent growth and profitability since inception. For more information, visit [franz.com](http://franz.com).

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