

No-Code Queries Can Accelerate AI and Data Analytics

By Dr. Jans Aasman, CEO

The low-code, no-code methodology is becoming highly sought-after throughout the modern IT ecosystem—and with good reason. Options that minimize manually writing code capitalize on the self-service, automation idiom that's imperative in a world in which working remotely and doing more with less keeps organizations in business.

Most codeless or low-code approaches avoid the need for writing language-specific code and replace it with a visual approach in which users simply manipulate on-screen objects via a drag-and-drop, point-and-click interface to automate code generation. The intuitive ease of this approach – which is responsible for new standards of efficiency and democratization of no-code development – has now extended to no-code query writing.

No-code querying provides two unassailable advantages to the enterprise. First, it considerably expedites what is otherwise a time-consuming ordeal, thereby accelerating data analytics and AI-driven applications and second, it can help organizations overcome the talent shortage of developers and knowledge engineers. Moreover, it does so by furnishing all the above benefits that make codeless and low-code options mandatory for success.

Read the full article at [DZone](#).

Why Young Developers Don't Get Knowledge Graphs



Dr. Aasman recently interviewed for this *Datanami* article.

Business is booming these days for graph databases—maybe it took COVID to show us how connected everything is—and that's good news for Franz, which develops a semantic graph database called AllegroGraph. Just the same, you won't find CEO Jans Aasman spending much time convincing developers of a certain age to use it.

"If you live in our world of semantic graph databases, I only talked to people over 35, 40," Aasman tells *Datanami*. "I never talk to young developers."

The problem with younger developers, he explains, is that they're usually interested in using the graph database to build point solutions to solve specific problems, as opposed to creating a wide base of knowledge that can not only solve a specific problem, but be used with future solutions too. Plus, building point solutions exacerbates the data silo problem, he says.

"In our community of the semantic graph databases, literally everything is about integration and making sure that everything can interoperate," the Franz CEO continues. "And there's not a single young programmer that cares about that. Seriously. You're young, you want to do a fun project, your managers are saying, in three months I need this thing done."

You do whatever you want to do. Well, they get it done. And then you have new a data silo.”

Read the full article at [Datanami](#).

Franz Inc. Named to KMWorld's AI50

AllegroGraph's FedShard Technology Underpins Flexible AI Knowledge Fabrics

Franz Inc. has been named to KMWorld's AI50 – The Companies Empowering Intelligent Knowledge Management. Underscoring Franz's technology leadership in Graph-based AI, the company's Knowledge Graph Platform, AllegroGraph, was relied upon for market research in leading analyst reports, including Forrester's Now Tech: Multimodel Data Platforms, Q1 2021 and the Gartner Case Study: Entity-Event Knowledge Graph for Powering AI Solutions (Montefiore).

“A spectrum of AI technologies, including machine learning, natural language processing, and workflow automation, is increasingly being deployed by sophisticated organizations,” stated KMWorld Group Publisher Tom Hogan, Jr. “Their goal is simple. These organizations seek to excel in an increasingly competitive marketplace by improving decision making, enhancing customer interactions, supporting remote workers, and streamlining their processes. To showcase knowledge management solution providers that are imbuing their offerings with intelligence and automation, KMWorld created the AI 50: The Companies Empowering Intelligent Knowledge Management.”

“Franz Inc. has a rich, innovative Artificial Intelligence

history and we are honored to receive this acknowledgement for our efforts in delivering scalable AI Knowledge Graph Solutions,” said Dr. Jans Aasman, CEO, Franz Inc. “We are seeing demand for Intelligent Data Fabrics take off across industries along with recognition from top technology analyst firms that Knowledge Graphs provide the critical foundation for Data Fabric solutions. AllegroGraph 7 with FedShard 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.”

AiThority Interview with Dr. Jans Aasman



Jans Aasman, please tell us about your current role and the team / technology you handle at Franz.

As CEO of Franz Inc., I drive the overall technology vision for our Enterprise Knowledge Graph solutions and ensure our customer projects deliver the ROI results expected with graph based architectures.

Franz Inc. is composed of an expert team with skills in Graph Databases, Semantic technologies, Graph Visualization, AI, NLP and Machine Learning. Our domain knowledge

encompasses large enterprises in Healthcare, Pharma, Customer Support, and Intelligence Agencies.

Our main business today revolves around AllegroGraph, a Semantic Graph platform that allows infinite data integration through a patented approach unifying all data and siloed knowledge into an Entity-Event Knowledge Graph solution that can support massive big data analytics. AllegroGraph's FedShard feature utilizes patented federated sharding capabilities that drive 360-degree insights and enable complex reasoning across a distributed Knowledge Graph. AllegroGraph is utilized by dozens of the top Fortune 500 companies worldwide.

We also offer a popular data visualization and no-code query builder called Gruff – the most advanced Knowledge Graph visualization application on the market, which we recently integrated into Franz AllegroGraph. Gruff enables users to create visual Knowledge Graphs that display data relationships in views that are driven by the user. Ad hoc and exploratory analysis can be performed by simply clicking on different graph nodes to answer questions. Gruff's unique 'Time Machine' feature provides the capability to explore temporal context and connections within data. The visual query builder within Gruff empowers both novice and expert users to create simple to highly complex queries without writing any code.

Read the full interview at AIThORITY.

KM Global Network Conference

– Visualizing Knowledge (Recording)

The Knowledge Management Global Network (KMGN) is a not for profit community founded in 2014. It is composed of a network of national communities for Knowledge Management practitioners. KMGN is the formalization of a relationship between KM partner association to share resources and work collaboratively.

Dr. Jans Aasman presented – Visualizing Knowledge

NLP: Unlock the Hidden Business Value in Voice Communications



By Dr. Jans Aasman, CEO, Franz Inc.

Today organizations capture an enormous amount of information in spoken conversations, from routine customer service calls to sophisticated claims processing interactions in finance and healthcare. But most of this information remains hidden and unused due to the difficulty of turning these conversations

into meaningful data that can be effectively analyzed through Natural Language Processing (NLP).

Simply applying speech recognition software to voice conversations often results in unreliable data. State-of-the-art speech recognition systems still have trouble distinguishing between homophones (words with the same pronunciation, but different meanings), as well as the difference between proper names (i.e. people, products) and separate words. In addition, there is also the challenge of identifying domain-specific words accurately. Thus, in most cases, using speech recognition software alone doesn't produce accurate enough data for reliable NLP.

Domain-specific taxonomies are key to understanding conversations via speech recognition systems. With them, we can feed conversations to knowledge graphs that understand the conversation and make connections in the data. Knowledge graphs provide the ability to extract the correct meaning of text from conversations and connect concepts in order to add business value.

Knowledge graphs fed with NLP provide two prime opportunities for monetization. First, organizations can better understand their customers to improve products and services more to their liking, which in turn boosts marketing, sales and customer retention rates. Secondly, this analysis gives contact center agents real-time support for optimizing customer interactions to produce faster resolutions, better conversion rates, and cross-selling and up-selling opportunities. These approaches enable companies to capitalize on speech recognition knowledge graphs, accelerate their ROI, and expand their bottom lines.

Taxonomy Driven Speech Recognition

The story of taxonomy-driven speech recognition closely relates to knowledge graphs. The first wave of knowledge graphs was built from taking structured data and turning it

into semantic graphs that support the linked open data movement. The next wave is all about unstructured data. People started doing Natural Language Processing on documents and textual conversations like emails and chats. Doing so accurately for a given domain requires a taxonomy to understand the words and concepts. Otherwise, downstream processes like entity extraction and event detection won't work.

Read the full article at DZone.

The Future of AI: Machine Learning and Knowledge Graphs

Bringing knowledge graph and machine learning technology together can improve the accuracy of the outcomes and augment the potential of machine learning approaches. With knowledge graphs, AI language models are able to represent the relationships and accurate meaning of data instead of simply generating words based on patterns.

Read this special report to dive into key uses cases, best practices for getting started, and technology solutions every organization should know about.

The Future of AI: Machine Learning and Knowledge Graphs

Gartner Case Study: Entity-Event Knowledge Graph for Powering AI Solutions (Montefiore)

Gartner featured Franz's customer, Montefiore Medical Center, in a research report on Montefiore's Entity-Event Knowledge Graph:

"AI solutions are often hindered by fragmented data and siloed point solutions," according to Gartner's Chief Data and Analytics Officer Research Team. "Montefiore's data and analytics leader used semantic knowledge graphs to power its AI solutions and achieved considerable cost savings as well as improvements in timeliness and the prediction accuracy of AI models." Source: Gartner Case Study: Entity-Event Knowledge Graph for Powering AI Solutions (Montefiore) – Subscription required.

Copy Available from Montefiore/Einstein.

Understanding What Matters With Text Analytics and NLP

Dr. Jans Aasman was quoted extensively in this KMWorld Article:



Whether employing traditional rulesbased approaches to text analytics or leveraging more modern machine learning strategies, users must initially train the systems on

relevant business domains. One way to do so is with comprehensive taxonomies of terms, their synonyms, and their meanings—which are traditionally associated with rules-based models. According to Franz CEO Jans Aasman, “There’s a part of NLP where people create taxonomies and ontologies. That is just a very acceptable way of doing NLP.” Historically, such defined hierarchies of vocabularies were paired with rules to find patterns in text and create actions such as classifications or entity extraction.

The trade-off between this approach and the taxonomic one is clear: Organizations can forsake the extensive time required to build taxonomies by simply using annotated training data. The objective is to “just throw statistics and machine learning at the problem so it will all automatically work,” Aasman said. Although reduced time-to-value is an advantage of the deep learning approach, there are issues to consider, including the following:

- ◆ **Training data:** Machine learning models require immense amounts of training data, which organizations might not have for their domains. Transfer learning solves this problem by enabling subject matter experts to upload a couple of hundred examples (instead of thousands), highlight them, and teach dynamic models “the representative entities, key-value pairs, and classes they’re trying to derive from these documents,” Wilde noted.

- ◆ **Controlled vocabularies:** Transformers and techniques such as Bidirectional Encoder Representations from Transformers (BERT)

reduce the training data quantities for machine learning models, broaden the array of training data that's relevant, and implement a controlled vocabulary that otherwise isn't as defined as taxonomic ones. Thus, organizations can take a phrase and "generate a similar phrase that means the same, but can be used in multiple reports in a controlled way," Mishra said. Additionally, it's possible to simply purchase libraries of terms and definitions. "Many companies end up buying those things to be able to incorporate those capabilities," Shankar added.

♦ Practical knowledge: Exclusively using machine learning models to train text analytics decreases the real-world understanding and applicability of text. "People that do machine learning don't want to spend the effort to create a vocabulary or the pragmatics or the semantics," Aasman noted. "Machine learning has a place in all of this, but it misses part of the whole future solution where we have systems that understand what people are talking about."

Read the full article at [KMWorld](#).

KMWorld 100 Companies that Matter Most – Franz Inc.

Franz Inc., is proud to announce that it has been named to The 100 Companies That Matter in Knowledge Management by KMWorld. The annual list reflects the urgency felt among many organizations to provide a timely flow of targeted information. Among the more prominent initiatives is the use of AI and cognitive computing, as well as related capabilities such as machine learning, natural language processing, and

text analytics.

“Flexibility, agility, and the ability to pivot are attributes that have become critical to forward-thinking companies—and that is particularly the case now. Successful organizations don’t want to merely survive; they want to dominate their market sectors. But to do that, they need the right tools and products,” said Tom Hogan, Group Publisher at KMWorld. “Amidst the dramatic changes taking place today, innovative organizations are seeking new approaches to improve their processes. The 2021 KMWorld 100 is a list of leading-edge knowledge management companies that are helping their customers to expand access to information, leverage new opportunities, and accelerate growth.”

[Read More about Franz Inc.](#)