

DATASTACK

Unleashing the power of GenAI

Preventing Hallucinations, Securing AI and Controlling Costs

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Meet Michel and Dieter

Michel de Ru
Solution Engineer



Dieter Flick
Solution Engineer



Abstract

Join Dieter and Michel in this session as they demonstrate how leveraging Astra DB's vector store and Langflow can significantly expedite the development of applications powered by LLMs. This session will provide a detailed look into how these technologies streamline the creation and deployment of LLM-driven solutions, significantly speeding up development processes.

The session will start with an introduction to the vector capabilities of Astra DB, which are essential for managing the high-dimensional data demands of generative AI applications. We will then focus on how Langflow, a pioneering low-code platform, accelerates the development lifecycle of LLM-powered applications. By facilitating rapid prototyping and iteration, Langflow enables developers to reduce development time dramatically.

Agenda

- Setting the Context
- Astra DB and its Vector Capabilities
- Vectorize the Easy Path
- Coding vs No-Coding
- Takeaways

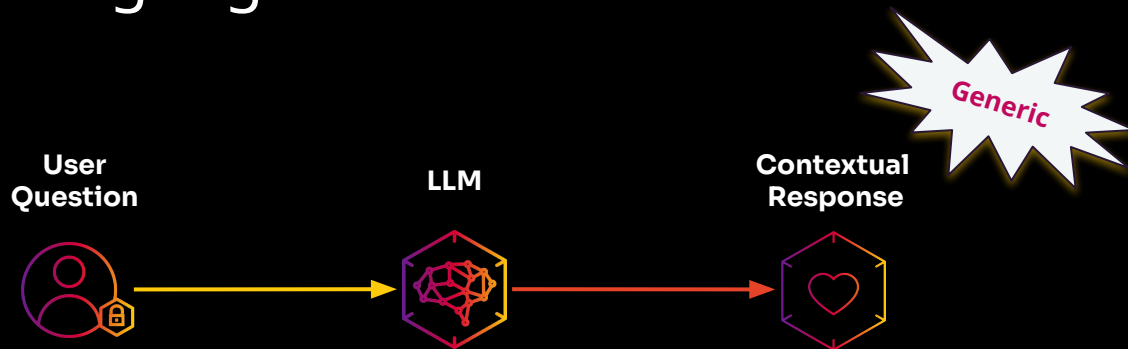
Setting the Context

“AI can be dangerous if it doesn't know which data is correct”

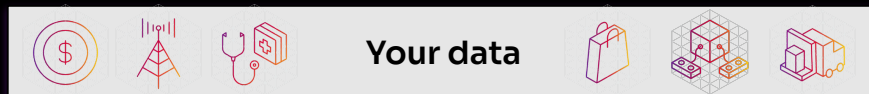
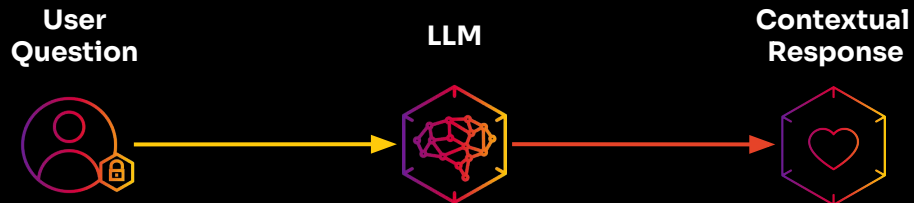
A concern among developers, users and Michel's neighbour

$$1 + 1 = 3$$

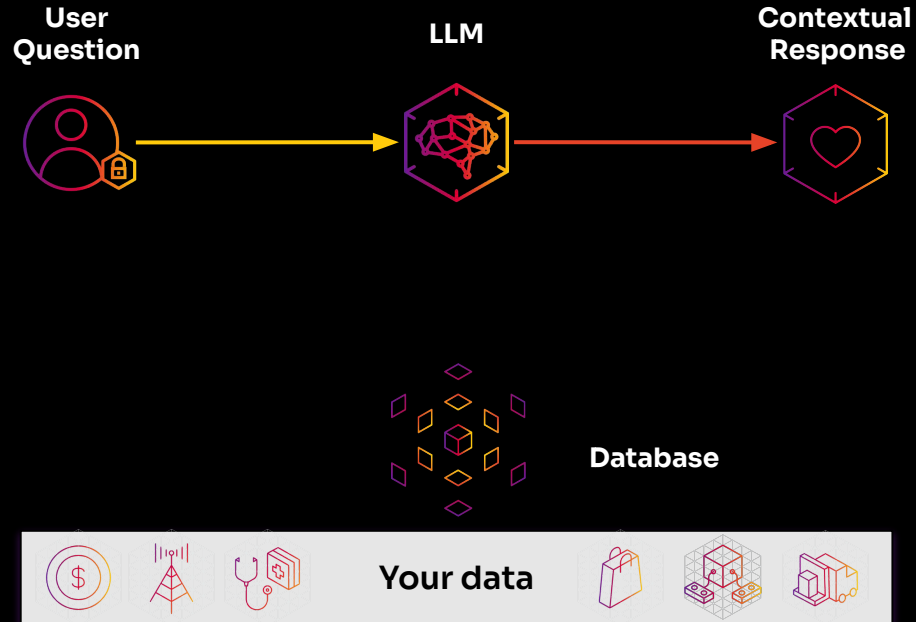
Just a Large Language Model



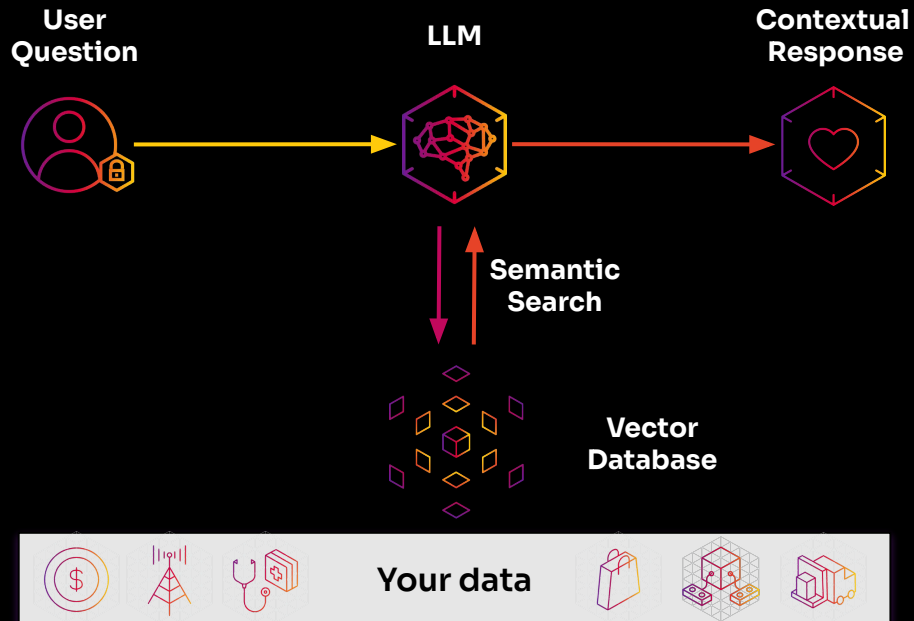
Tapping into your data



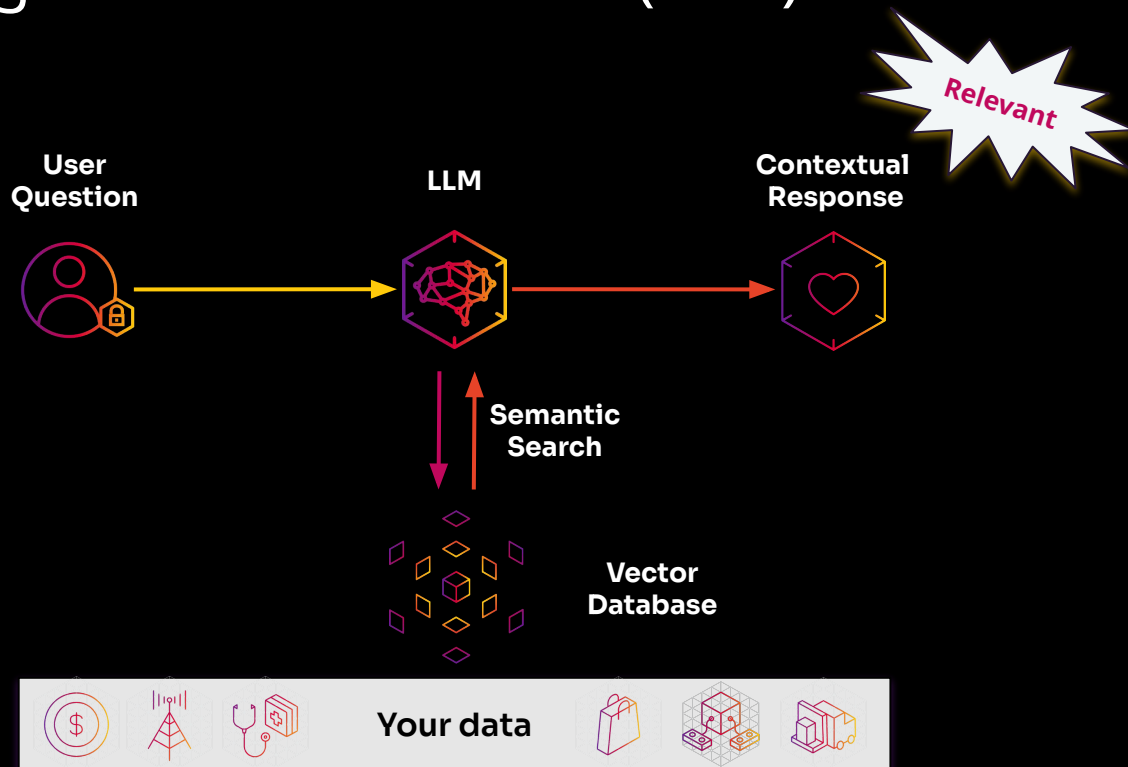
We need a database



With Semantic Search



Retrieval Augmented Generation (RAG)



Demo:
Without vs. with RAG

Takeaway no. 1

Leverage your competitive advantage

Your data and content are your crown jewels.

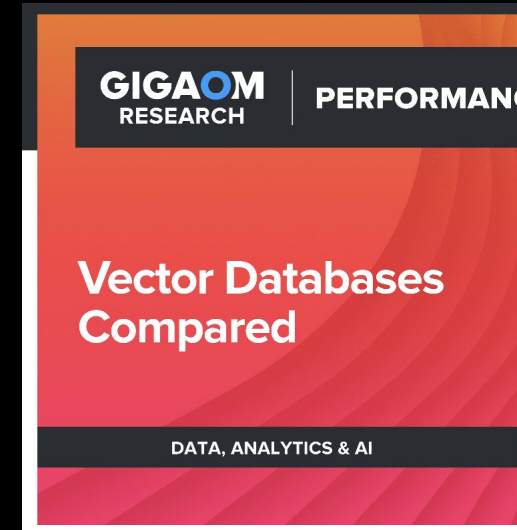
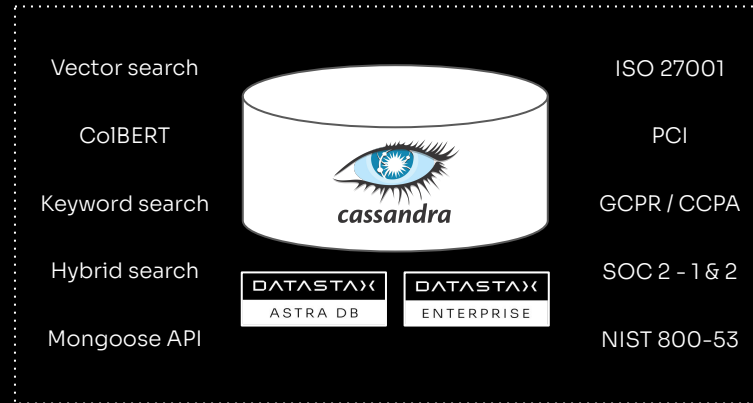
Keep them close so you're in full control of innovation and application.

Prevent hallucinations, securing AI, controlling cost

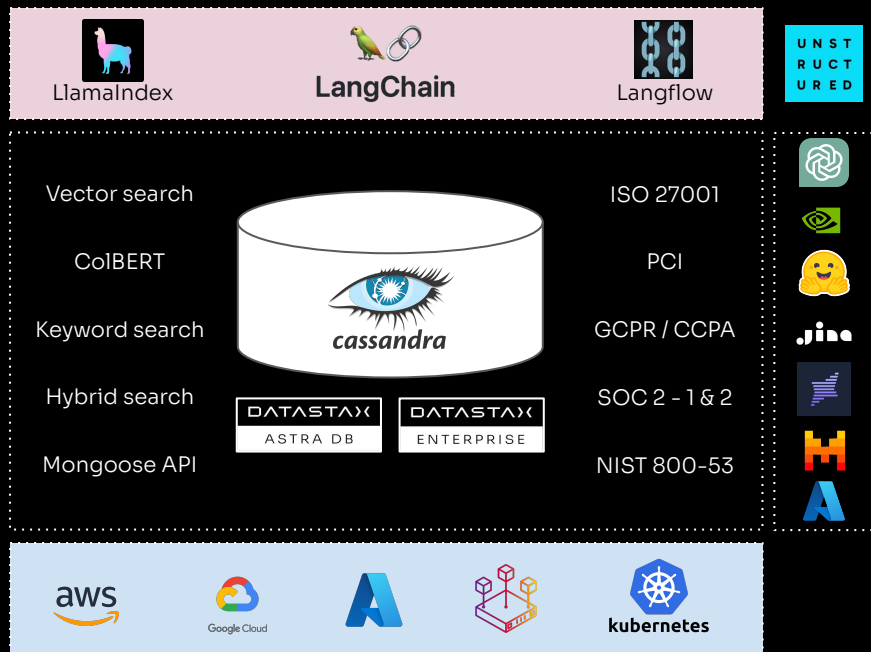
Astra DB and its Vector Capabilities



Up to **20% more relevant AI Search** than Pinecone
9x more throughput
Up to **74x faster response times**
Astra DB delivers vector data updates with **ZERO delay**

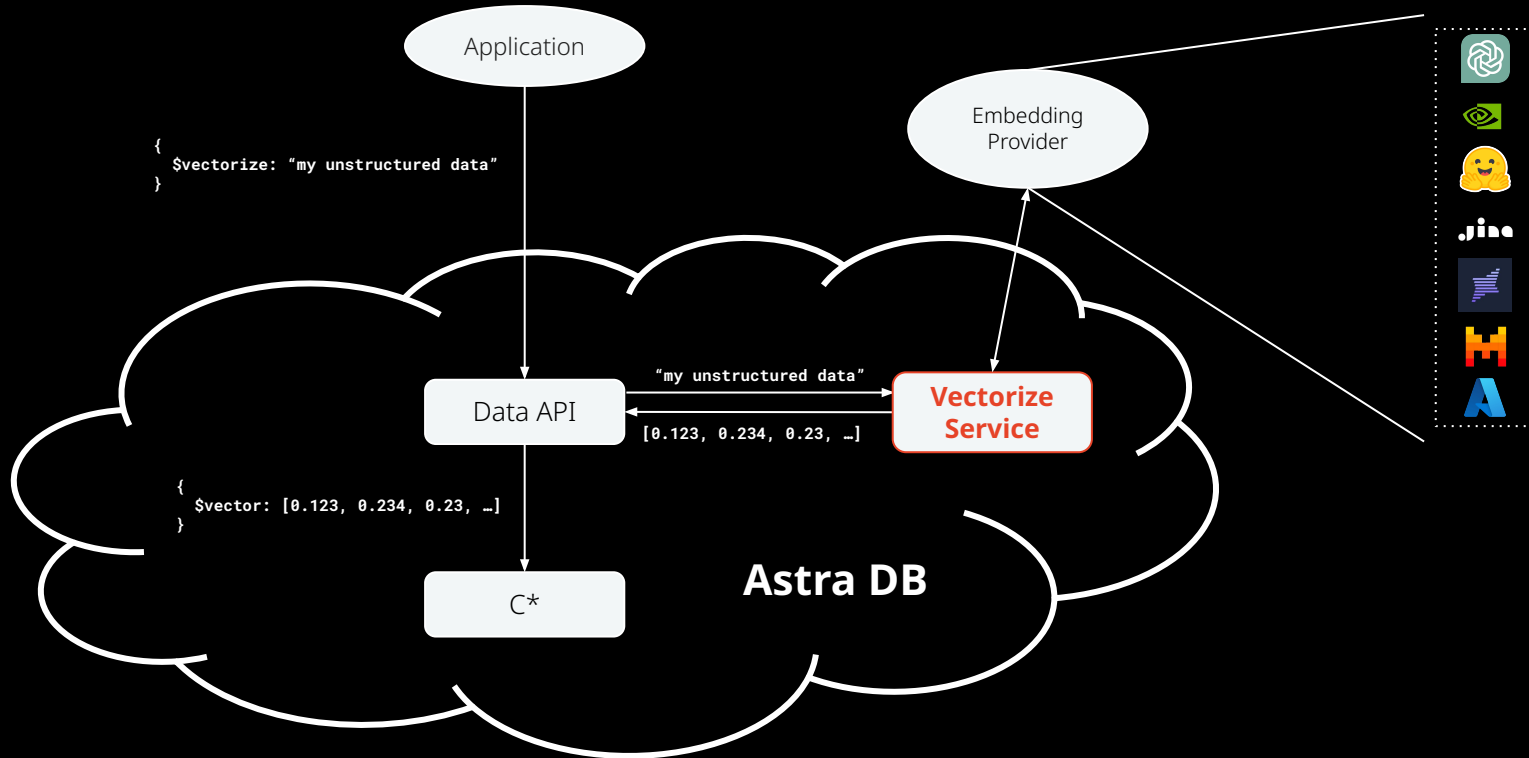


Introducing RAGStack



RAG on your data in the **public cloud** as well as **private cloud**

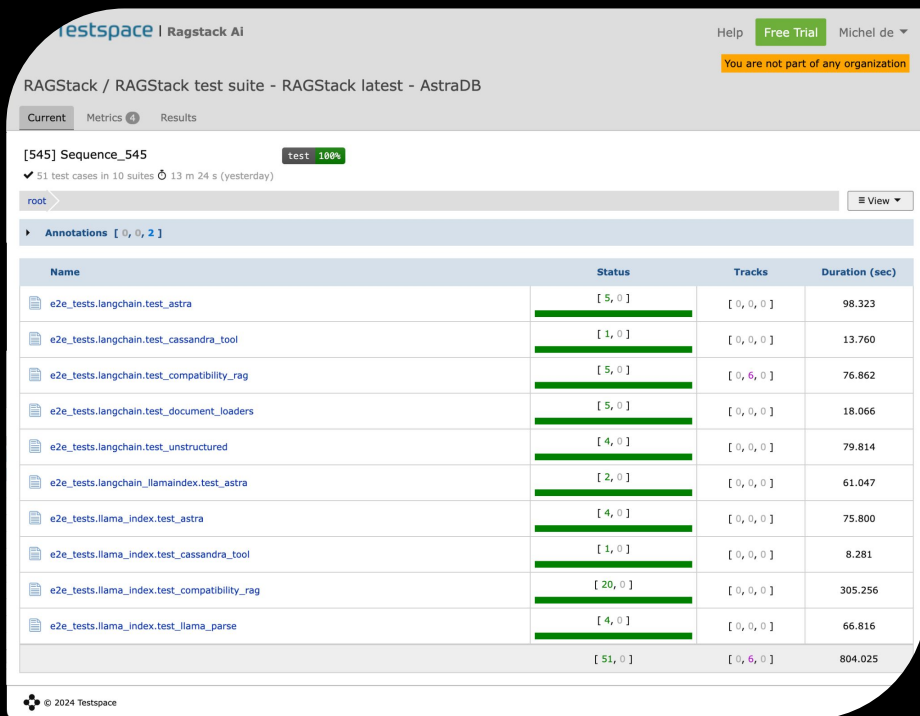
Vectorize the Easy Path



Demo:

Vectorize the Easy Path

RAGStack is ready for the enterprise



Curated stack for GenAI

Opinionated stack with LangChain, Langflow, LlamaIndex, Unstructured.io and more.

Dependency management

Brittle dependencies are something of the past with guaranteed to work package mgmt.

Vulnerability tested

Automated tests make sure no vulnerabilities creep in through 100s of dependencies

Enterprise ready

With 24x7x365 support offered through a well trusted partner. Also includes Long Term Support (LTS).



“Every company building with generative AI right now is looking for answers about the most effective way to implement RAG within their applications,” said Harrison Chase, CEO, LangChain.

“DataStax has recognized a pain point in the market and is working to remedy that problem with the release of RAGStack. Using top-choice

technologies, like LangChain and Astra DB among others, Datastax is providing developers with a tested, reliable solution made to simplify working with LLMs.”



See the joint webinar



Harrison Chase
CEO, LangChain

Coding demo with RAGStack

Langflow

- A UI for **LangChain**
- Low-code approach to build AI and LLM-powered applications.
- Makes it 100x faster for developers to prototype, iterate and ship AI applications to production.



No-Coding demo with Langflow

Takeaway no. 2

It's not about AI tools and services

Tomorrow a better AI will emerge. But your data and content will always be your crown jewels.
Make sure you stay in control and leverage a database with Vector support.
Leverage enterprise hardened solutions like RAGStack and use rapid prototyping tools.

What will you (re)create today?



Try it on Astra DB get \$300 of credits and win!
(raffle for new signups)

2x spot at the DataStax
Oktoberfest table

DATASTACK

One-click RAG @ Scale



Visit us in Hall 2.2 Booth 2_02

DATASTAX