

# SISENSE HUNCH REWRITES THE RULES OF BIG DATA ANALYTICS



Sisense's new data cognition engine, Sisense Hunch, revolutionizes Big Data analytics, condensing immense amounts of data into lightweight deep neural networks (DNNs) for quick and easy analysis. Huge amounts of data no longer mean long query times and more hardware. Pull insights out of even the largest datasets at high speeds, then embed and explore them anywhere, including edge computing, Internet-of-Things use cases.

## PROBLEMS WITH BIG DATA

### SHACKLED TO UNDERLYING DATA

The world is changing; data is now Big Data. Querying these huge datasets with the near-instantaneous response times needed for interactive analysis is a huge technological hurdle. Existing solutions fail to deliver this level of interactivity due to an inherent flaw—they all require continued access to the underlying data. Some failed attempts at solving the problem include:



#### HIGH-PERFORMANCE COMPUTING SYSTEMS

Expensive purpose-built systems designed for rapid processing of larger data sets.



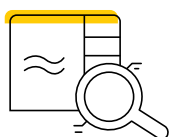
#### HADOOP & MAPREDUCE

A collection of open-source technologies which run on arrays of commodity hardware, dividing up Big Data queries across multiple computers, then reassembling the results.



#### DATA SUMMARIES

Pre-processing some results and storing them alongside the Big Data source for fast retrieval of a limited set of queries.

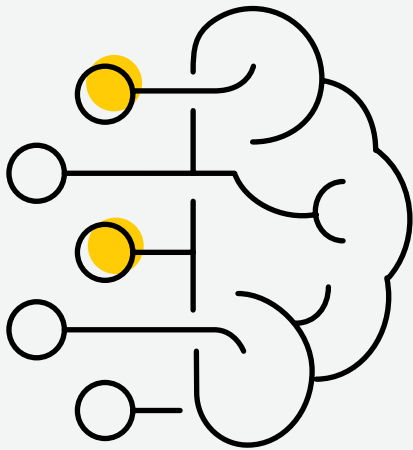


#### QUERY APPROXIMATION SYSTEMS

Calculating an approximate answer by taking a statistical sample of the Big Data store rather than the entire dataset.

All these solutions ultimately have drawbacks. Focusing on finding ways to process big data queries faster by just putting in more expensive computational horsepower or via architectural manipulation just isn't enough. Sisense continues our mission of **radical innovation** by taking a dramatically different approach: Sisense Hunch is not just a new capability, it is an **entirely new class of analytics** that helps organizations solve data and analytics challenges that were previously insoluble.

# SISENSE HUNCH: A NEW CLASS OF ANALYTICS FOR BIG DATA



## FREEING BIG DATA ANALYTICS FROM UNDERLYING DATA

**Sisense Hunch** works by first creating a huge set of possible queries covering many angles of a Big Data store. It uses that set to train a **deep neural network** (DNN), which is only a tiny fraction of the original data size. This DNN can now be placed anywhere and can answer queries directly with **sub-millisecond** response times and 99% accuracy or better. Hunch can respond to any query, even those that were not part of the original training process. All this, with no need for continued access to the underlying data!

## WHAT CAN YOU DO WITH HUNCH?

### MAKE BIG DATA INTERACTIVE

Enjoy interactive data exploration over terabytes of data using Sisense Hunch's sub-millisecond response times. The slower Big Data system is only queried directly when very precise detail is required.

### BRING THE VALUE OF BIG DATA TO THE EDGE

Sisense Hunch packs the value of Big Data sets into DNNs that occupy only a few megabytes for each terabyte. Put the power of your data anywhere you need it while eliminating the need for storage, processing power, and bandwidth.

### GUARANTEED 100% DATA PRIVACY

Since Sisense Hunch doesn't retain any knowledge about the lowest level of detail in your data, there is zero risk that queries could return sensitive data that is prohibited by your policy or regulatory compliance requirements.

### ZERO FOOTPRINT BIG DATA "STORAGE"

Go ahead and drain your data swamp. In cases where the row-level detail is not needed or cannot be stored (such as with GDPR), Sisense Hunch can completely replace Big Data repositories with a nearly accurate solution that will satisfy most analytic needs.

Big Data is changing the world, and Sisense Hunch changes how you can interact with your Big Data. If you're ready to tackle your biggest challenges in a whole new way, email [hunch@sisense.com](mailto:hunch@sisense.com) or visit [sisense.com/sisense-labs/hunch](https://sisense.com/sisense-labs/hunch).