



The Data Spaces value for AI: Facilitate the Sovereignty of Your Models

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Data Spaces Symposium Darmstadt

March 12th, 2024

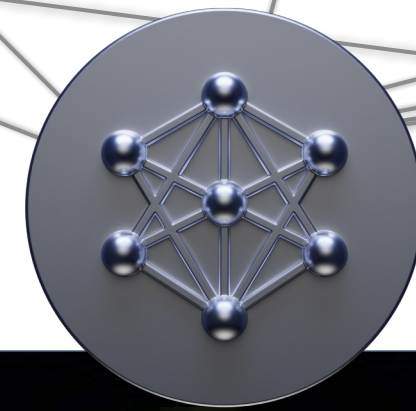
NVIDIA AI Platform

APPLICATION FRAMEWORKS

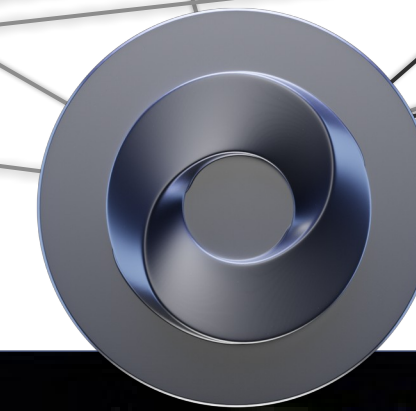


PLATFORM

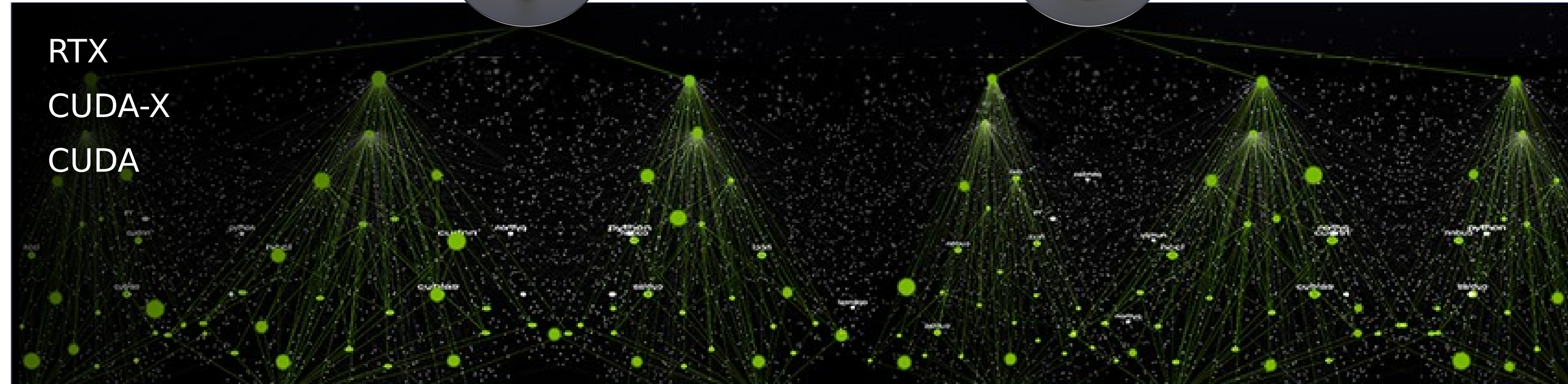
NVIDIA AI



Omniverse



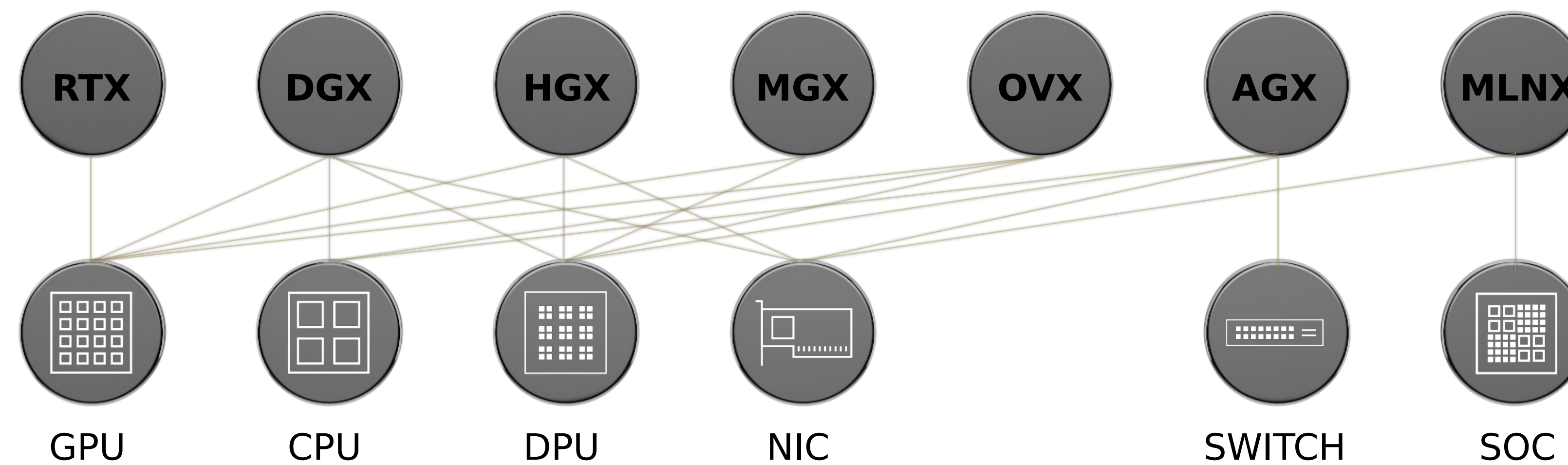
ACCELERATION LIBRARIES



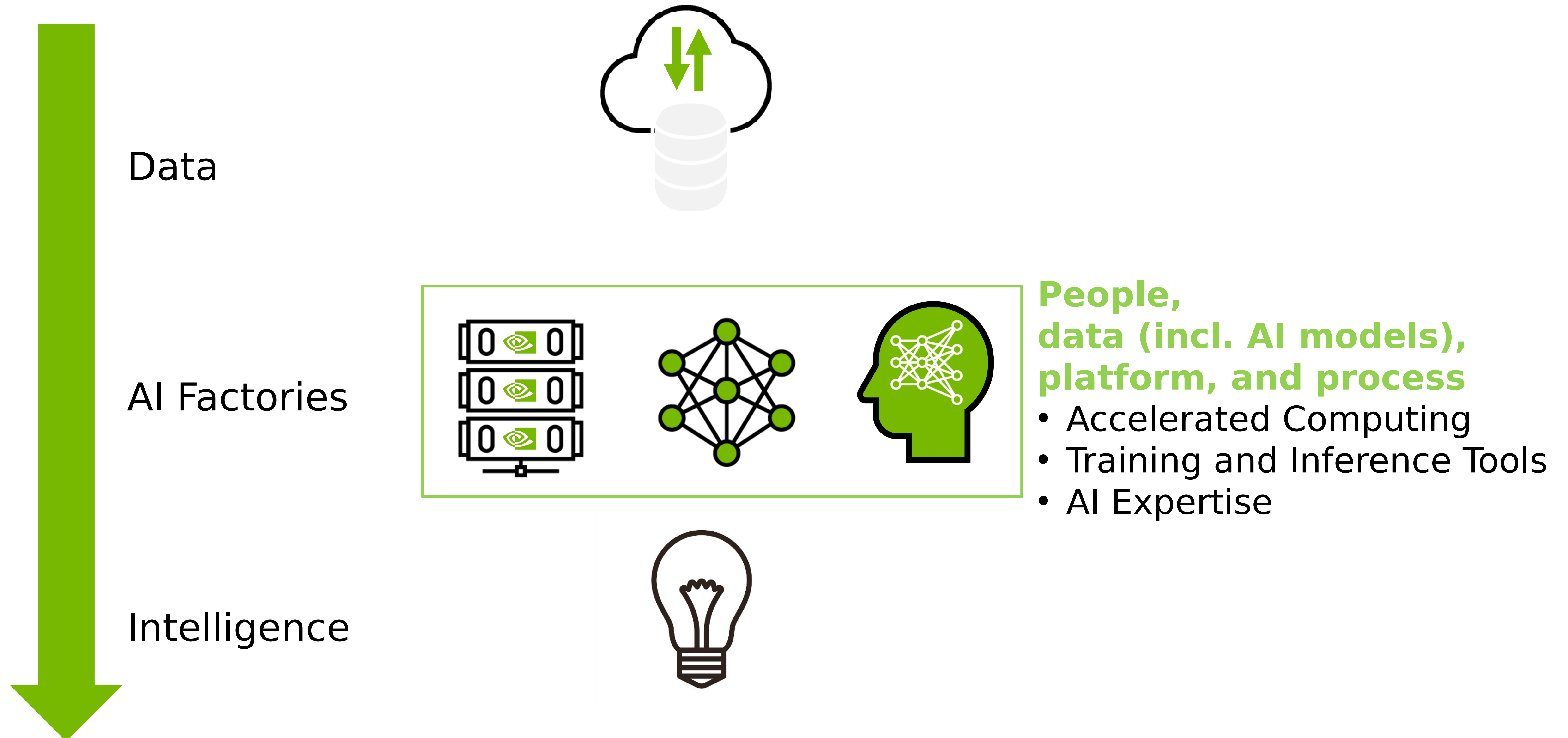
SYSTEM SOFTWARE



HARDWARE

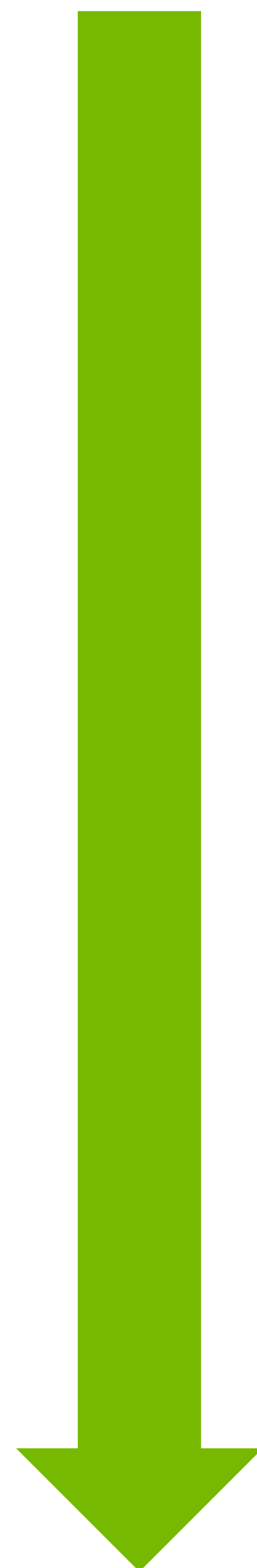


From Data to Intelligence

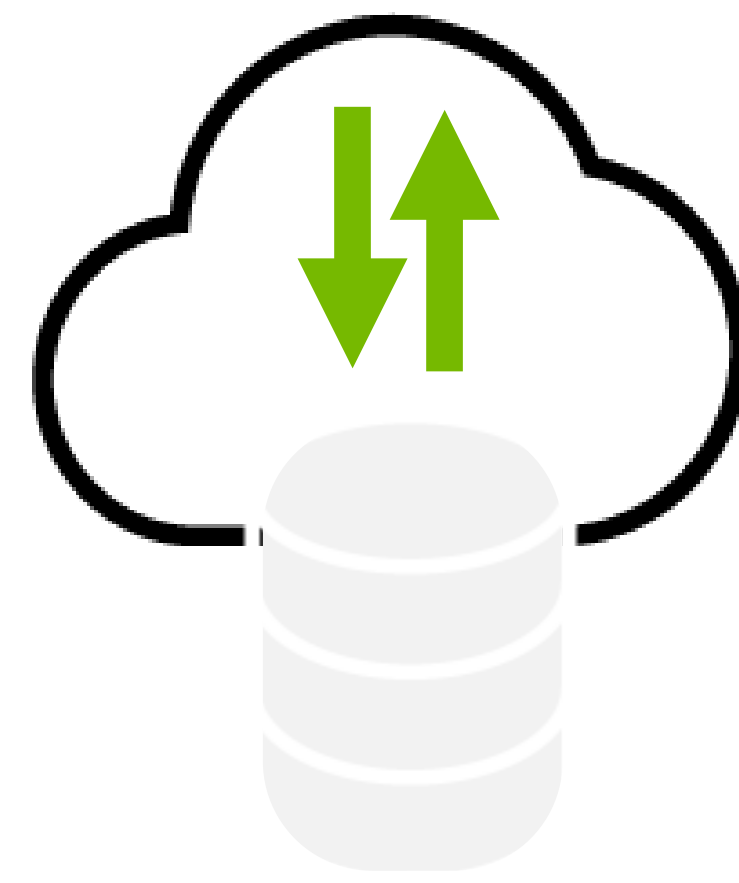


Data Sovereignty

Sovereignty of data, sovereignty of AI Factories



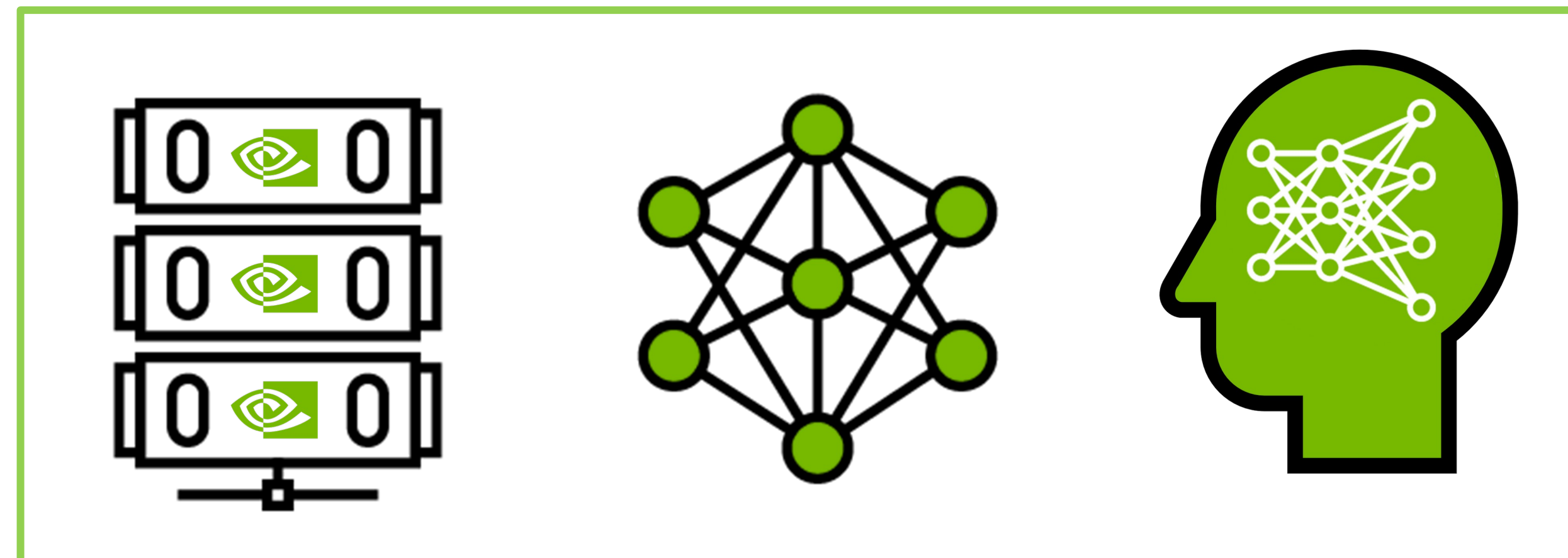
Data



Data Space

- Trusted Space, decentralized
- Shared, common standards
- Enabled transactions

AI Factories
NCPs



Structuring data using AI

- Country, Nation, city, region
- Company, Enterprise
- Individuals, everybody
- ..can get them to do, what they want

Intelligence



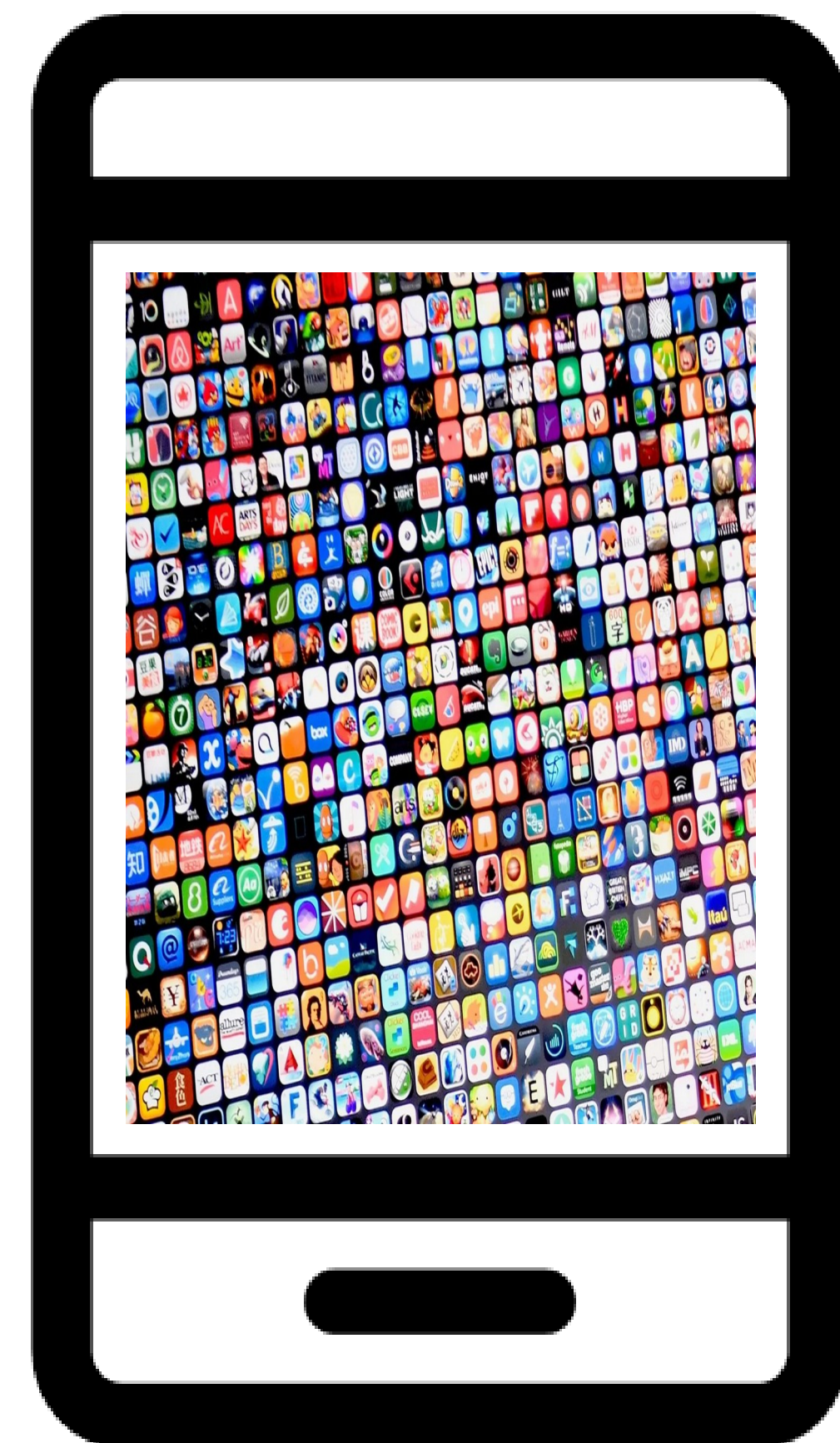
Democratized, but sovereign, AI

- Success through domain expertise
- Relatively easy
- Build and use your own sovereign data current historical cultural

AI Factory Models

GenAI Training and Inferences services, geographically coupled

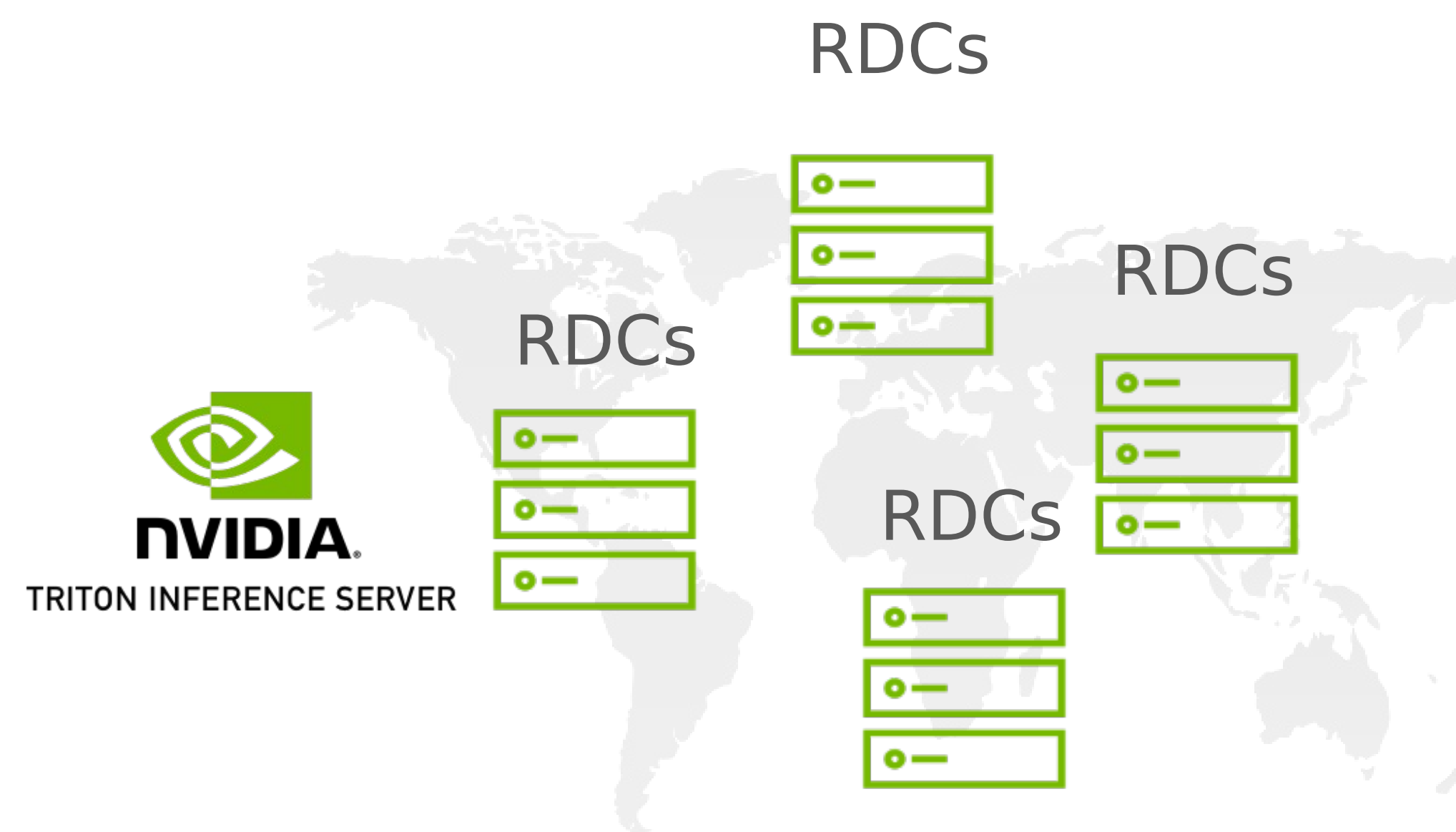
Every App is infused and improved with Generative AI



API
Query →
Result ←

Regional Data Centers (RDCs) Inference Engines

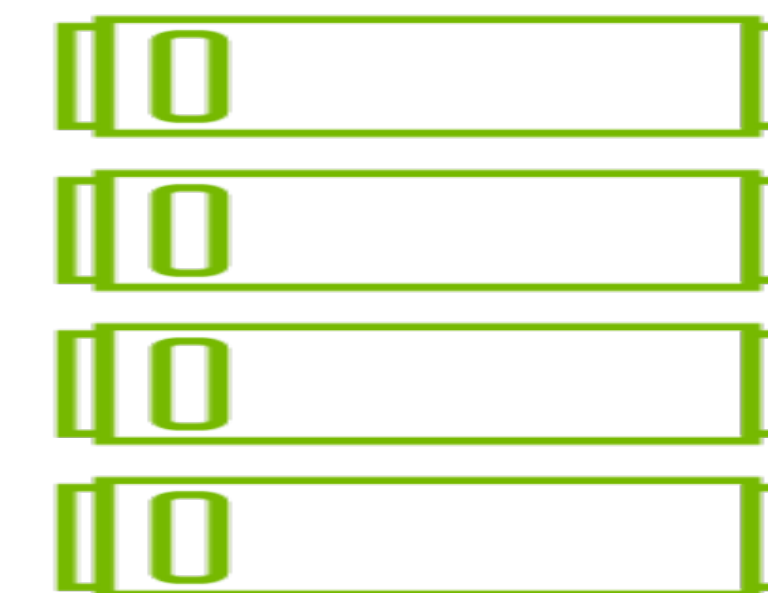
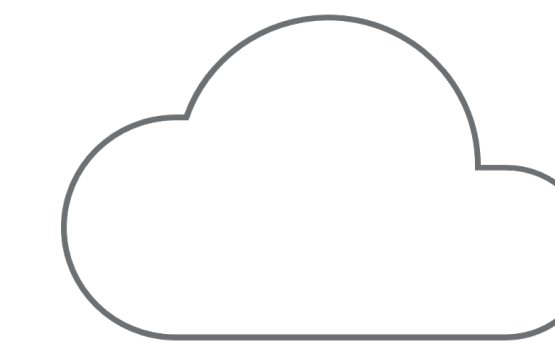
~100s locations



LLM adoption by Apps drive regionalization of inference engines

National Data Centers (NDCs) Training clusters

~10s locations



LLM creation requires access to AI Factory for Training

AI Factory Enables Sovereign Manufactured Intelligence



AI Factory

AI supercomputers are the foundation for AI development and access to AI platform



Sovereign

Development of language and data-specific Large Language Models (LLMs)



AI Nations

AI to increase productivity, upskill, social development and competitive advantage

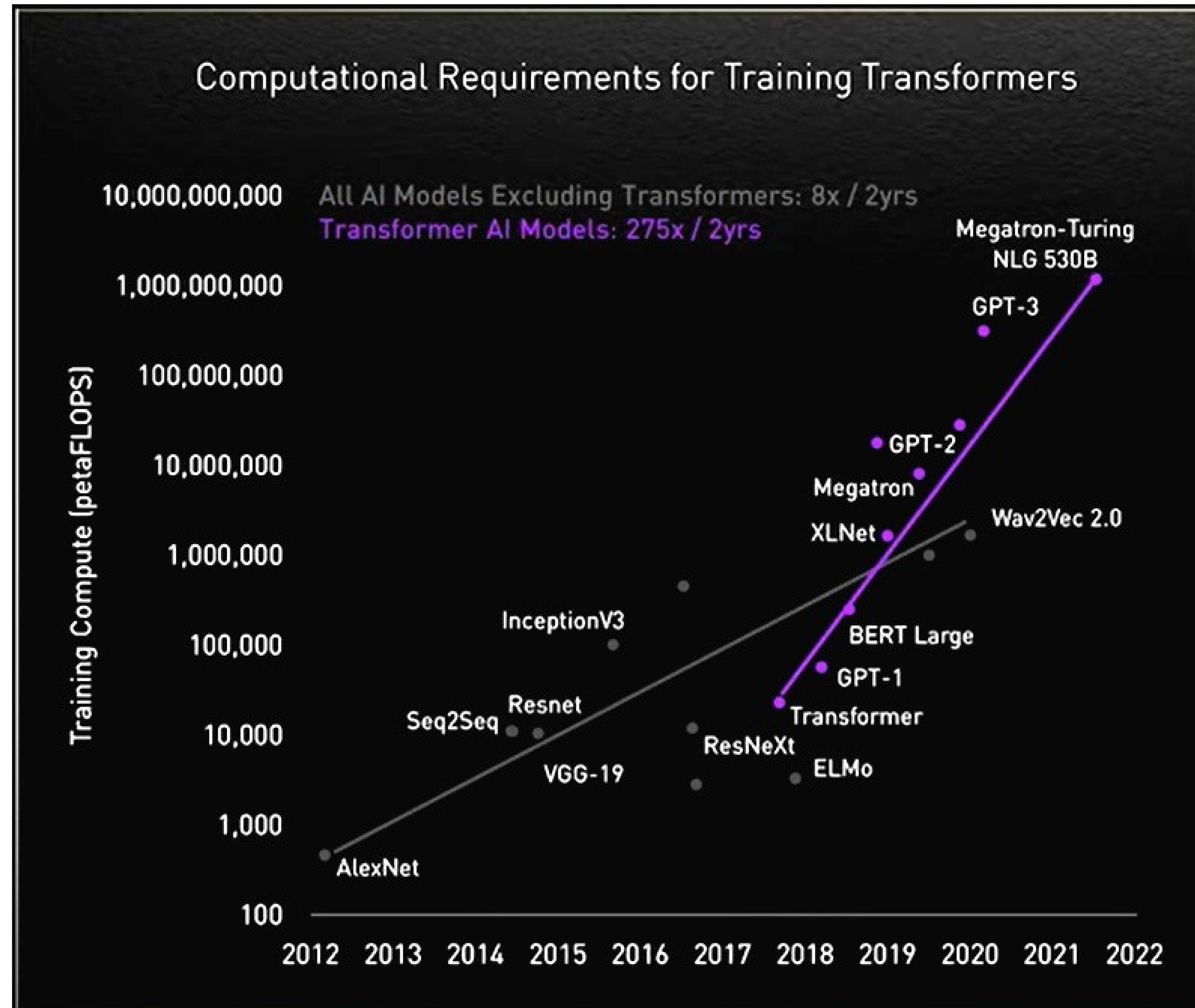


AI Start ups

Engine for economic growth driving innovation across industries.

Increased Compute made Generative AI possible

Increased compute power in the last 10 years by 10 Million times



Transformer Models overcame Supervised Learning

Talk to the videos, emails, images you have and ask questions

A transformer model learns context and thus meaning by tracking relationships in sequential data like the words in this sentence.

First described in a 2017 paper from Google, transformers are
- among the newest and
- one of the most powerful classes of models invented to date.

Stanford researchers called transformers “foundation models” in an August 2021 paper because they see them driving a paradigm shift in AI.

The “sheer scale and scope of foundation models over the last few years have stretched our imagination of what is possible,” they wrote.

Transformers can detect trends and anomalies to prevent fraud, streamline manufacturing, make online recommendations or improve healthcare.

People use transformers every time they search on Google or Microsoft Bing.

Any application using sequential text, image or video data is a candidate for transformer models.

Created with large datasets, transformers make accurate predictions that drive their wider use,

