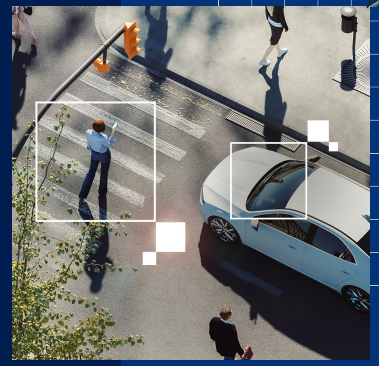
intel ai

Embracing the Future with Intel's AI Portfolio and its Impact on Enterprise

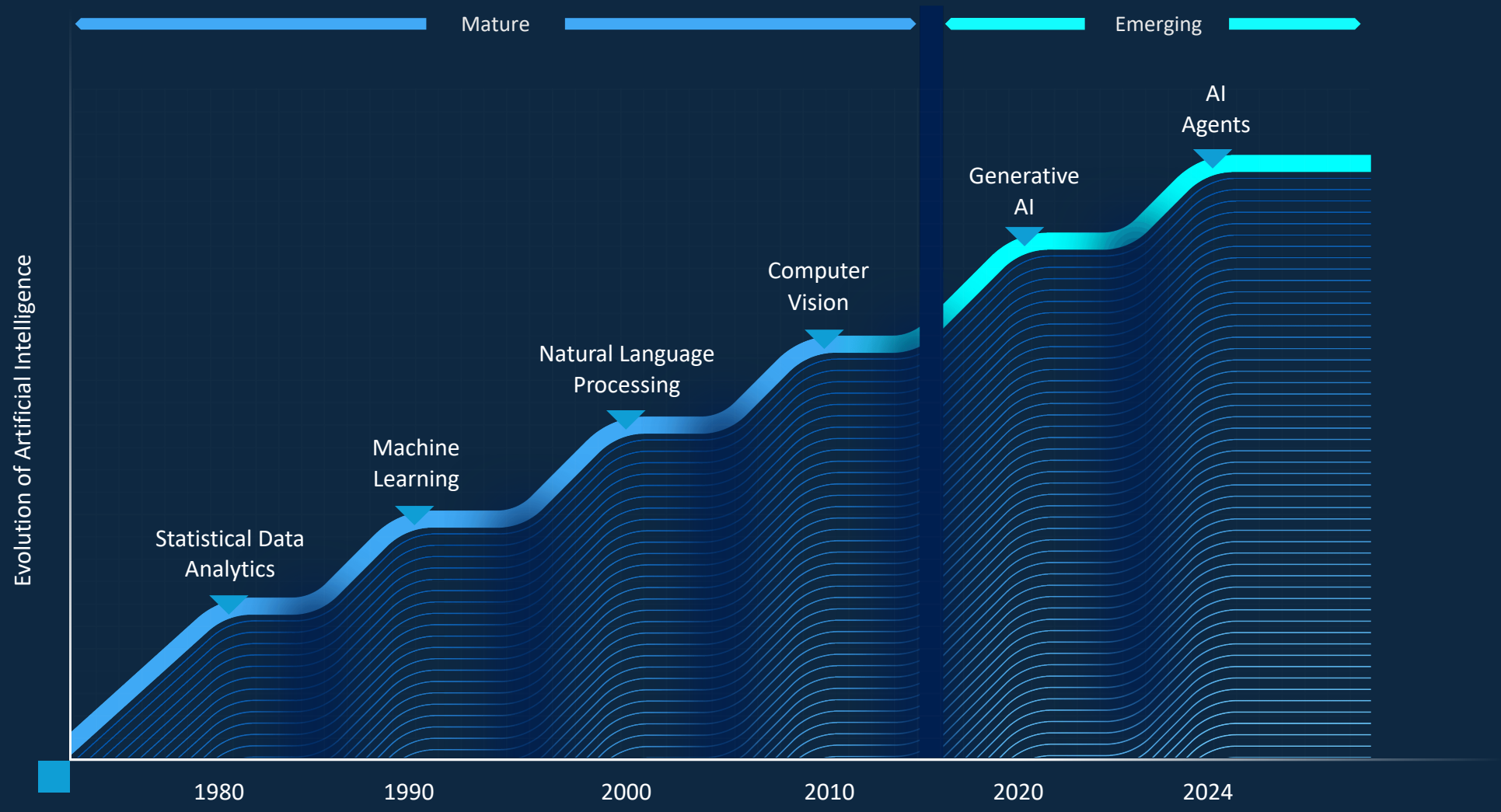


Albertano Caruso, Sales Application Engineer

Swiss Dev Confederation,

Zürich, Sept 23rd 2025

Evolution of AI Applications in Enterprise Use Cases



Understanding AI Segmentation

Regression

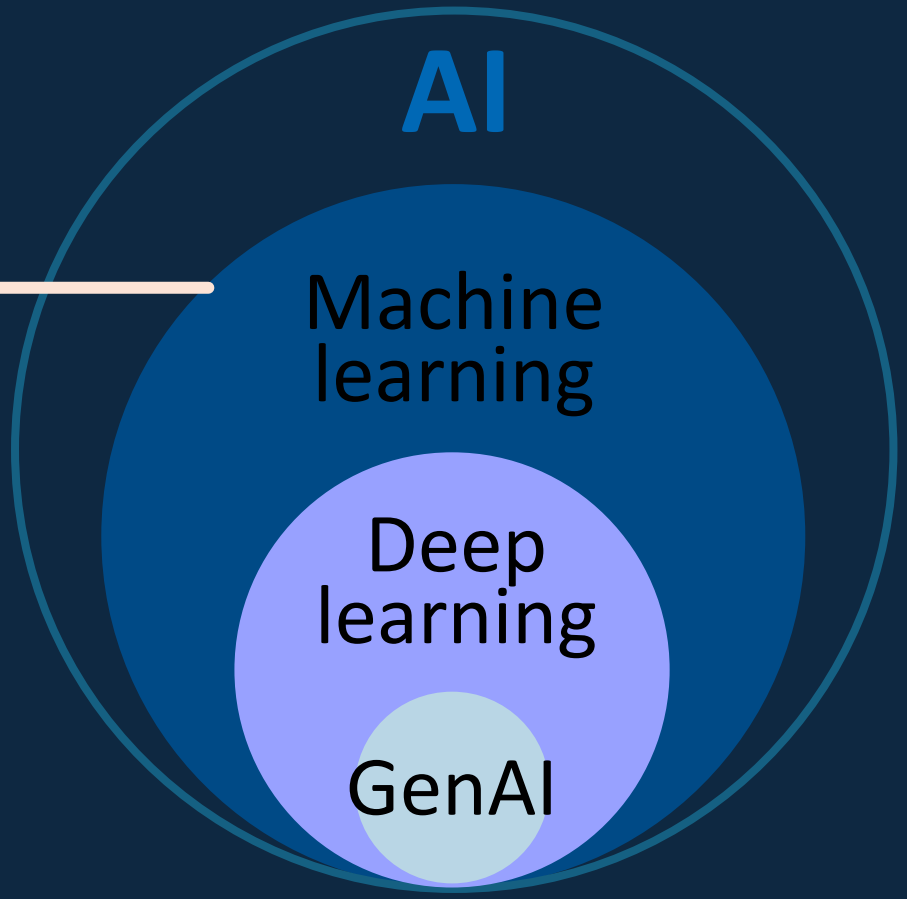
Classification

Clustering

Decision Trees

Data Generation

- ✓ Practical to reverse engineer
- ✓ Tabular/limited dataset
- ✓ Good enough accuracy
- ✓ Fully-explainable



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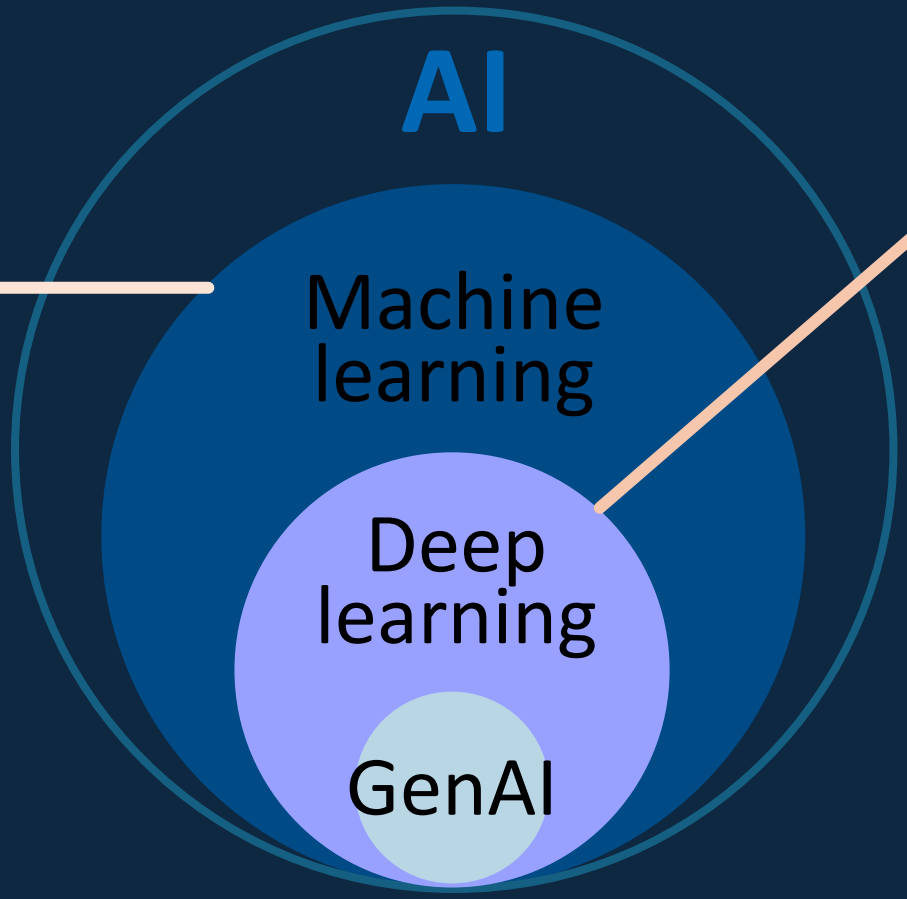

Image Processing

Natural Language Processing

Recommender Systems

- ✓ Difficult problem to reverse engineer
- ✓ Large, uniform dataset
- ✓ Highest accuracy

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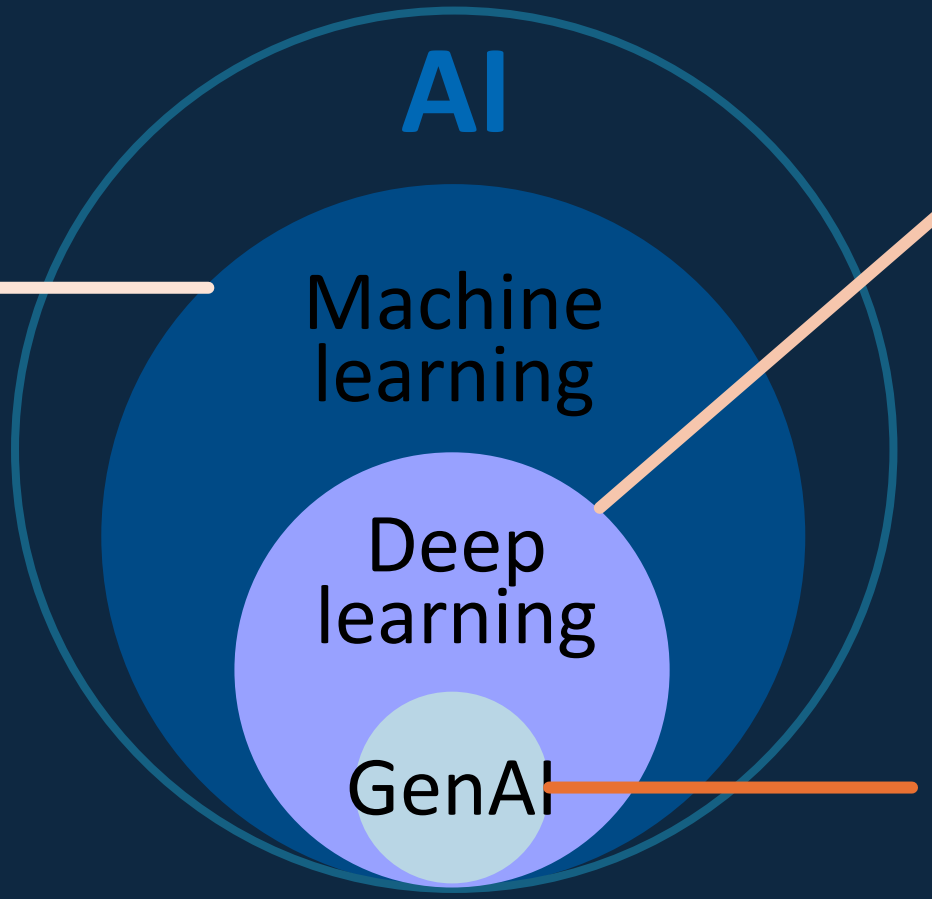

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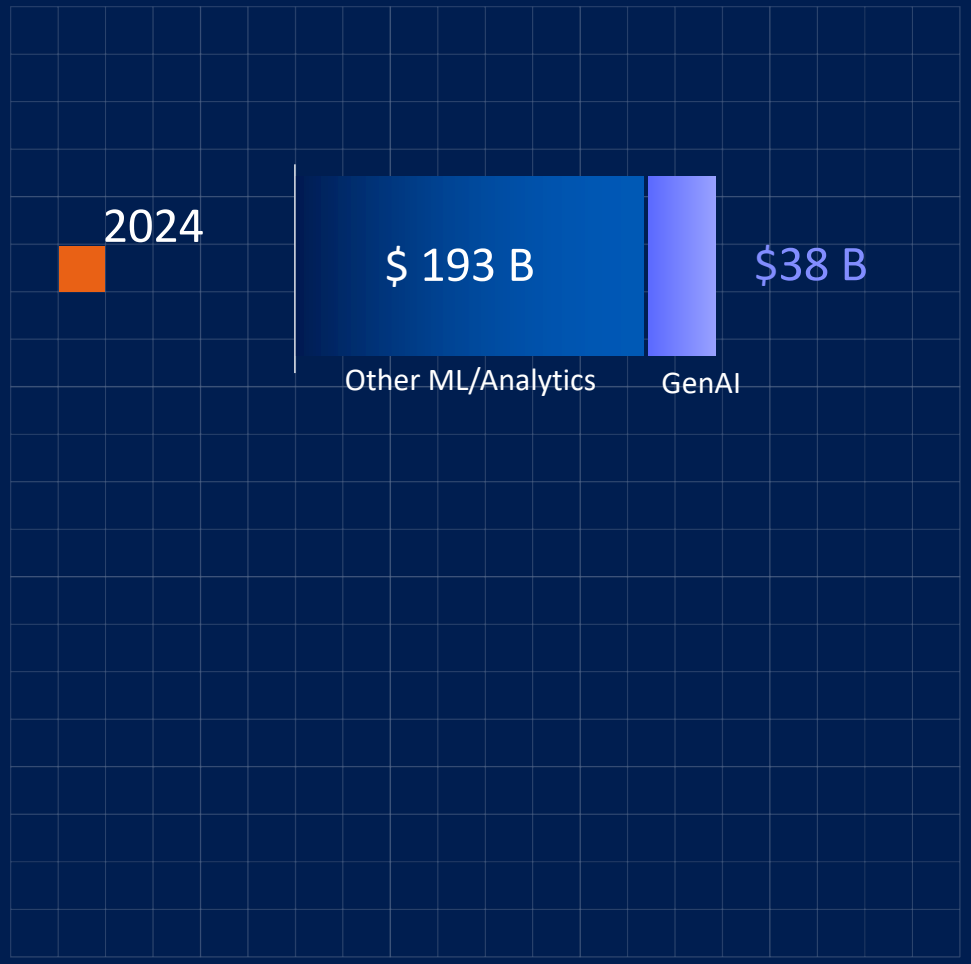
Subset of AI that focuses on creating new, original content

- ✓ **GenAI algorithms** use advanced techniques like deep learning and neural networks to produce realistic and coherent outputs

The AI Landscape is broad.
Both Gen AI and ML/Analytics are growing.



https://www.gartner.com/en/documents/4558899
https://www.idc.com/fdsfile/download/0cb3a164-e692-412b-a7ce-514e5f3bcee3

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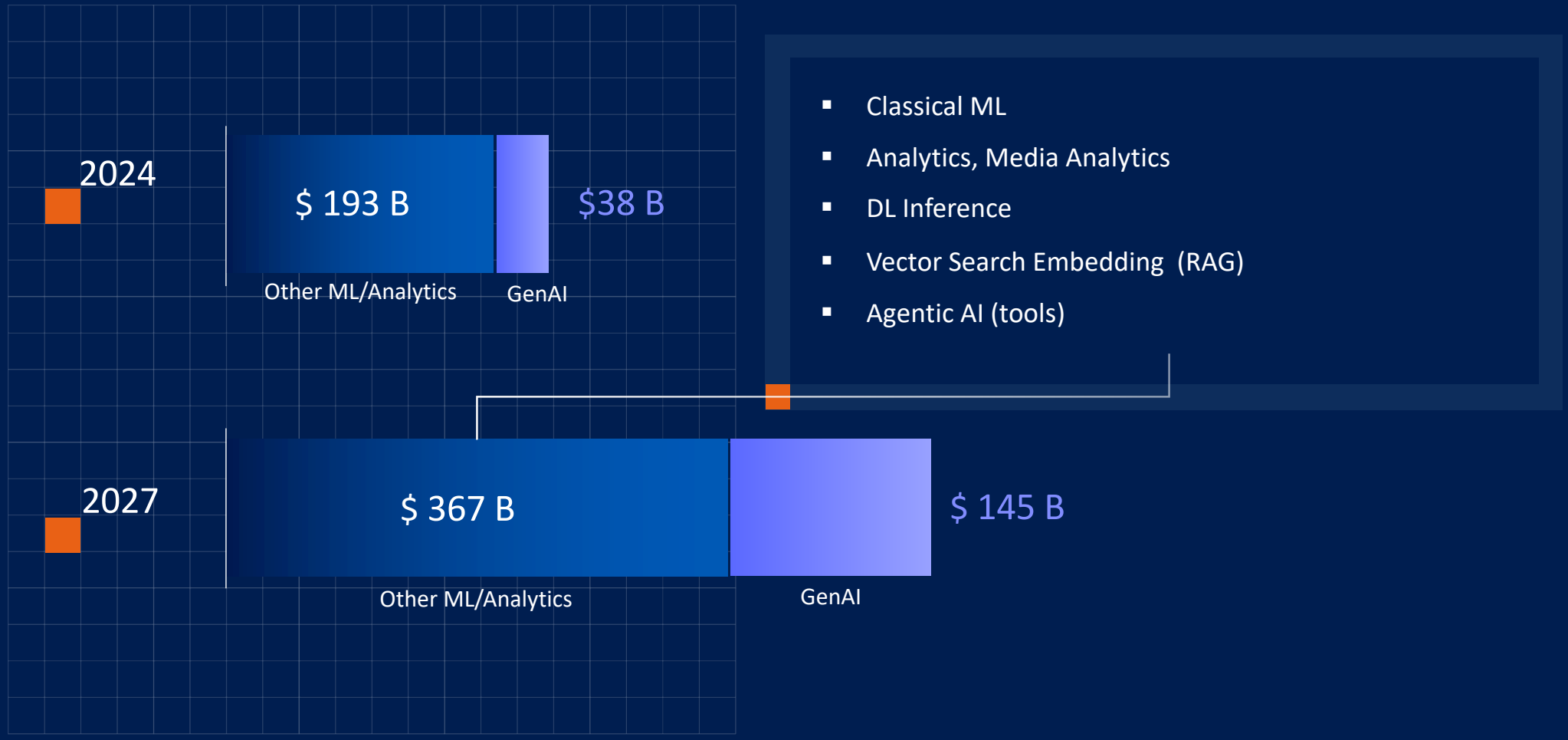
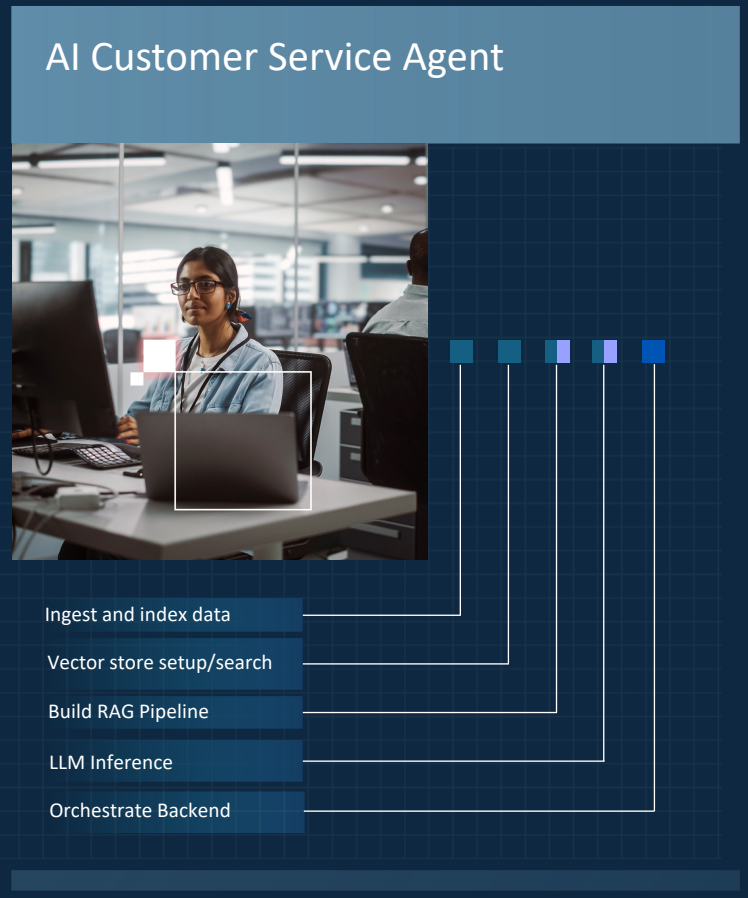


- Classical ML
- Analytics, Media Analytics
- DL Inference
- Vector Search Embedding (RAG)
- Agentic AI (tools)

https://www.gartner.com/en/documents/4558899
https://www.idc.com/fdsfile/download/0cb3a164-e692-412b-a7ce-514e5f3bcee3

AI Integrates into Every Enterprise Workload



AI Functions

General Purpose

AI Integrates into Every Enterprise Workload

AI Customer Service Agent

- Ingest and index data
- Vector store setup/search
- Build RAG Pipeline
- LLM Inference
- Orchestrate Backend

Edge AI retail loss prevention

- Computer Vision analytics for Loss Prevention
- AI Driven Personalization
- Click & Pay Services
- Inventory Management
- Payment Gateway

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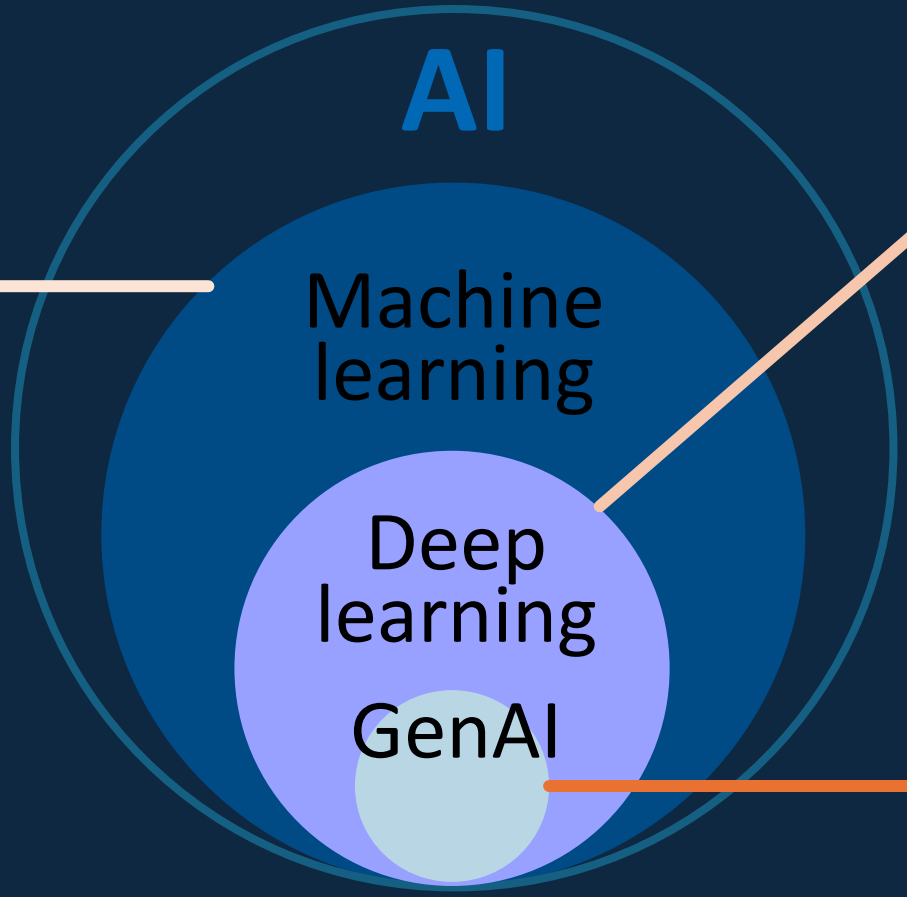
AI PC enabled marketer

- Claude generated DeepSeek Blog draft
- Imagery prompting from Stable Diffusion to enhance blog visuals
- Microsoft Productivity tools to review, finalize and publish blog

AI Functions

General Purpose

AI Segmentation & Intel Product Alignment



Regression

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30-year history of ML on CPUs

Image Processing

Natural Language Processing

Recommender Systems

Hits Customer's SLAs with fungible HW

Subset of AI that focuses on creating new, original content

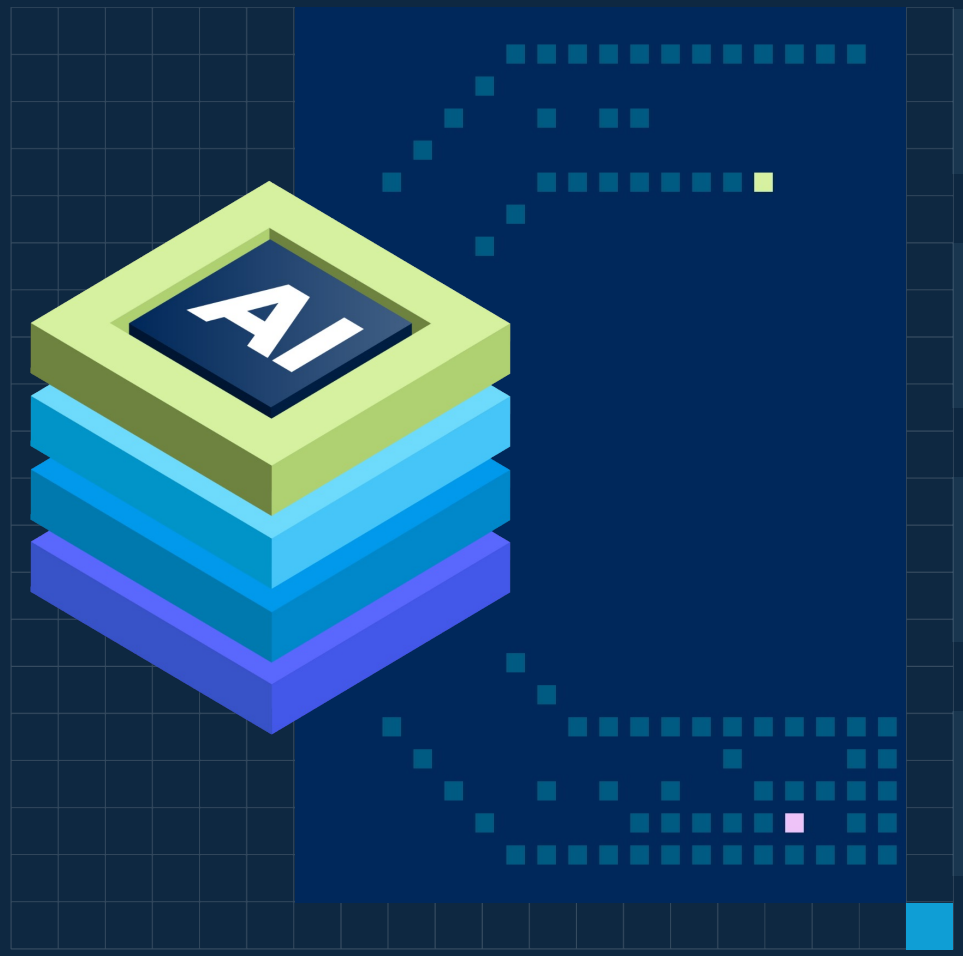
Inference

<20B Parameters

Training + Inference

Small to Large LLM's

Intel’s AI Strategy



Open	Less cost, No lock-in.
Innovation	AI PC to Edge to Datacenter & Cloud
Efficient	Performance per $ & per W leadership
Secure	Data as your IP & Models as your IP

Intel AI open SW & frameworks

Open Platform for Enterprise AI

Engineer Data	Create Models	Optimize & Deploy

MODIN, SciPy, pandas, NumPy, Spark, Numba

Data Analytics at Scale†

dmlc XGBoost, PyTorch, ONNX RUNTIME, OpenVINO, scikit-learn, TensorFlow, DirectML, SigOpt AutoML, intel Neural Compressor, W3C WebAssembly WebGPU WebNN

Machine & Deep Learning Frameworks, Optimization and Deployment Tools†

oneAPI

Intel® oneAPI Deep Neural Network Library | Intel® oneAPI Collective Communications Library | Intel® oneAPI Math Kernel Library | Intel® oneAPI Data Analytics Library

Open, multiarchitecture programming model for CPUs, GPUs, and other accelerators

Client & Workstation 

Edge 

Cloud & Enterprise 

intel AI TOOLS	Accelerate end-to-end data science and AI
Intel® Tiber™ Developer Cloud	Try the latest Intel tools and hardware, and access optimized AI Models
Intel® Tiber™ AI Cloud	Production and deployment at cloud scale
Intel® Geti™	Annotation/training/ optimization platform
Hugging Face	Intel optimizations and fine-tuning recipes, optimized inference models, and model serving

Note: components at each layer of the stack are optimized for targeted components at other layers based on expected AI usage models, and not every component is utilized by the solutions in the rightmost column

† This list includes popular open-source frameworks that are optimized for Intel hardware

What is OpenVINO™ Toolkit

OpenVINO™ open-source software enables users to convert, optimize, and deploy AI models across Intel and 3rd party hardware without any restriction imposed by proprietary licenses

Performance

Accelerates inference, reduces footprint, and optimizes hardware utilization while maintaining accuracy, so that you can build performant and efficient AI applications

Usability

Streamlines AI development and deployment, so that you can save time and maximize productivity

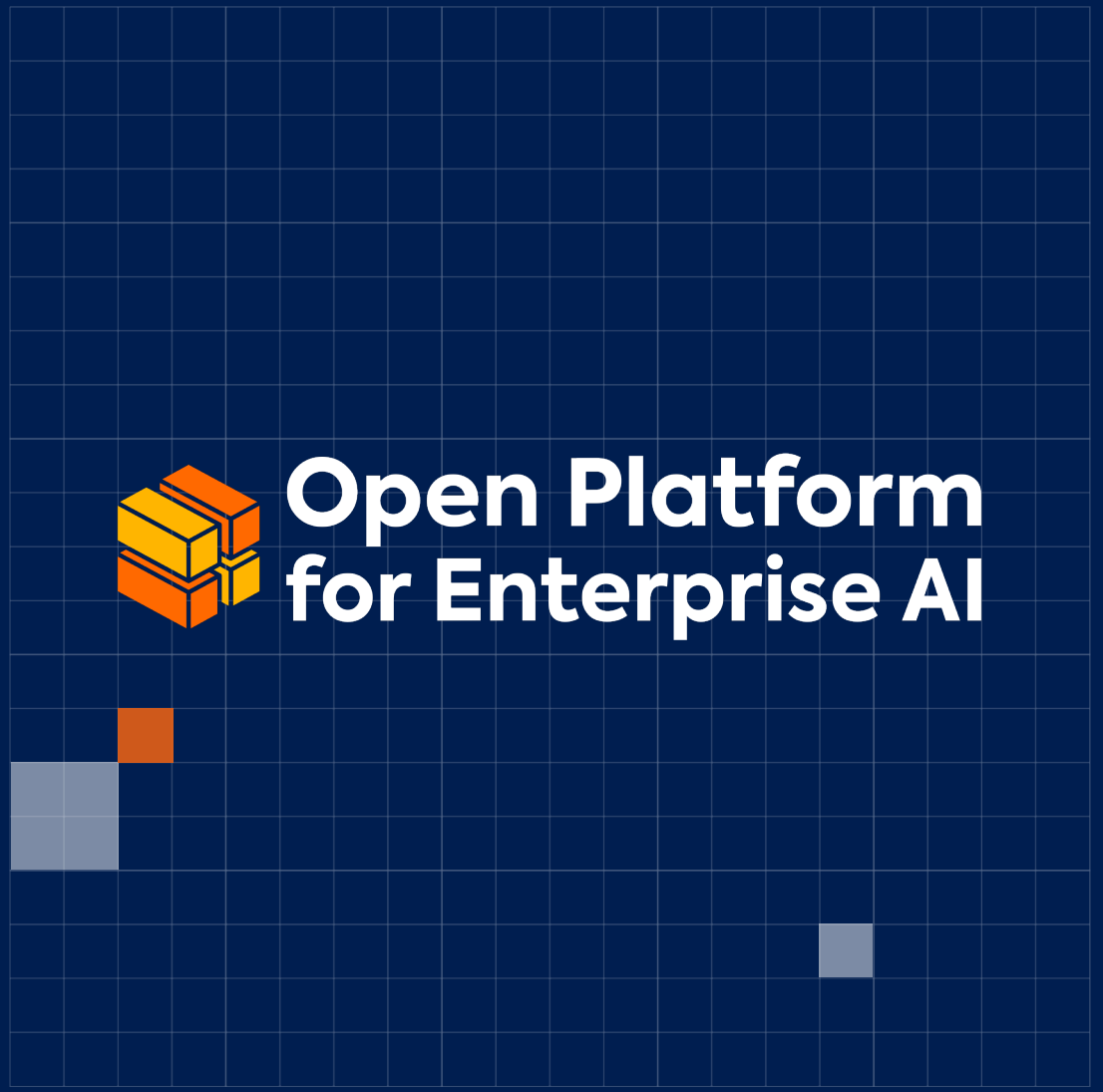
Versatility

Provides adaptability to different requirements and use cases, so that your application can meet current and future needs

Simplifying enterprise generative AI adoption and reducing the time to production of hardened, trusted solutions

Open Platform For Enterprise AI

Intel AI for Enterprise Inference

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