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Types of Artificial Intelligence

Al can be categorized into two categories based on its capabilities and functionalities.

Al types based on Capabilities

There are three types of AI based on its capabilities.

Artificial narrow intelligence ANI

Narrow AI is also called weak AI it can do specific tasks on which it is trained. It has a specific limit of capabilities. It can not perform tasks on which it is not trained. Examples are Siri, Alexa, Autonomous Vehicles, Google Assistant, etc.

Artificial General Intelligence AGI

Artificial General Intelligence is also called strong intelligence. it is the evolution of artificial intelligence where machines can think, decide, and do intellectual tasks like humans.

Artificial Super Intelligence ASI

This is the stage where artificial intelligence surpasses humans in intellectual and critical thinking.

Al types based on functionalities

There are four types of AI based on its functionalities.

Reactive Machines

This is the most basic type of artificial intelligence it does not possess any memory are pass data it only acts on present scenarios like Alpha goes by Google.

Limited memory

Limited memory AI has memory for a limited time. It stores data for a short time.

Theory of mind

In this AI can understand the emotions and feelings of humans and can interact with society

Self Awareness

Self-aware AI is a hypothetical concept. it will have consciousness and self-awareness and will surpass the human intelligence

<u>Difference b/w Data Scientist</u> <u>and Data Analyst</u>

Data Analyst Definition

Data analysts collect, organize, and analyze data sets to help companies or individuals make sense of information and drive smarter decision-making.

Data Sceintist Definition

Data scientists generally analyze big data, or data depositories that are maintained throughout an organization or website's existence, but are of virtually no use as far strategic or monetary benefit is concerned. Data scientists are equipped with statistical models and analyze past and current data from such data stores to derive recommendations and suggestions for optimal business decision-making.

Data Analyst Responsibilities

- Gathering Data
- Cleaning Data
- Modeling Data
- Interpreting Data
- Presenting Data

Data Scientist Responsibilities

- Identify valuable data sources and automate collection processes
- Undertake preprocessing of structured and unstructured data
- Analyze large amounts of information to discover trends and patterns
- Build predictive models and machine-learning algorithms
- Combine models through ensemble modeling
- Present information using data visualization techniques
- Propose solutions and strategies to business challenges
- Collaborate with engineering and product development teams

Data Analyst Skills

- SQL
- Statistical Programming
- Machine Learning
- Probability and statistics
- Data management
- Statistical visualizatrion
- Econometrics

Data Scientist Skills

- Programming
- Statistics and probability
- Data wrangling and database management
- Machine learning and deep learning
- Data visualization
- cloud computing
- Interpersonal skills

Large Language Model

LLM is an artificial intelligence algorithm that applies deep learning techniques to a bulk quantity of human Language or text using unsupervised learning techniques. Generative AI is the application of the Large Language Model.

Sr.	LLM Name	Made by	Specifications
01	GPT-4	OPEN AI	 Can accept both text and image Trained on 1+ trillion parameters Context length of 32,768 tokens
02	GPT-3.5	OPEN AI	 General purpose Trained on 175 billion parameters 16k tokens context length
03	PALM 2	GOOGLE	 Multi-lingual model Trained on 450 billion parameters Google Bard is running on it
04	CLAUDE V1	ANTHROPIC	- 100k tokens context window
05	COHERE	FORMER GOOGLE EMPLOYEES	6b-52b parametersAccurate and Robust