

Artificial Intelligence

Basic Day 1

Explore the fascinating world of Artificial Intelligence, from its core definitions and historical milestones to its diverse applications and the tools shaping our future.

What is Artificial Intelligence?

Definition of AI

AI is the ability of machines to mimic human intelligence, enabling them to understand language, recognize patterns, solve problems, and learn from experience.

Evolution of AI

From Alan Turing's test in 1950 to the rise of machine learning and deep learning in the 2000s, AI has continuously evolved.

Types of AI



Narrow AI

Performs specific tasks (e.g., voice assistants, face recognition).



General AI

Performs any intellectual task like a human (still in research phase).



Super AI

Hypothetical AI surpassing human intelligence (not yet real).

AI in Daily Life



Voice Assistants

Siri, Alexa, and Google Assistant.



Navigation

Google Maps for route prediction.



Face Unlock

Secure access on smartphones.



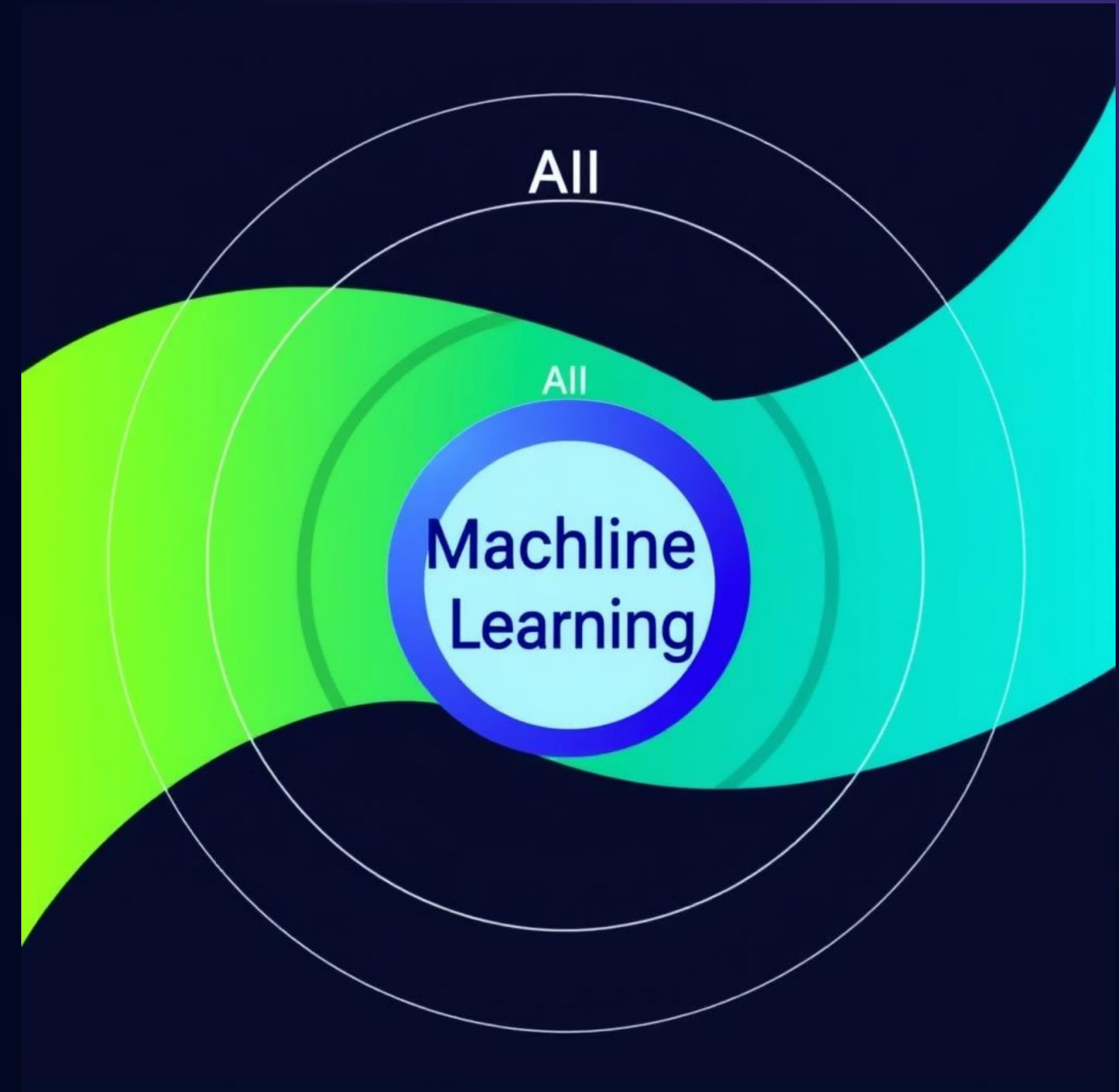
Recommendations

YouTube/Netflix personalized suggestions.

Core Concepts of AI

AI vs. ML vs. DL

- **AI:** General field of intelligent systems.
- **ML:** Subset of AI, machines learn from data.
- **DL:** Subset of ML, uses neural networks.



Key Fields in AI



Machine Learning

Algorithms learning patterns from data.



Natural Language Processing

AI understanding human language.



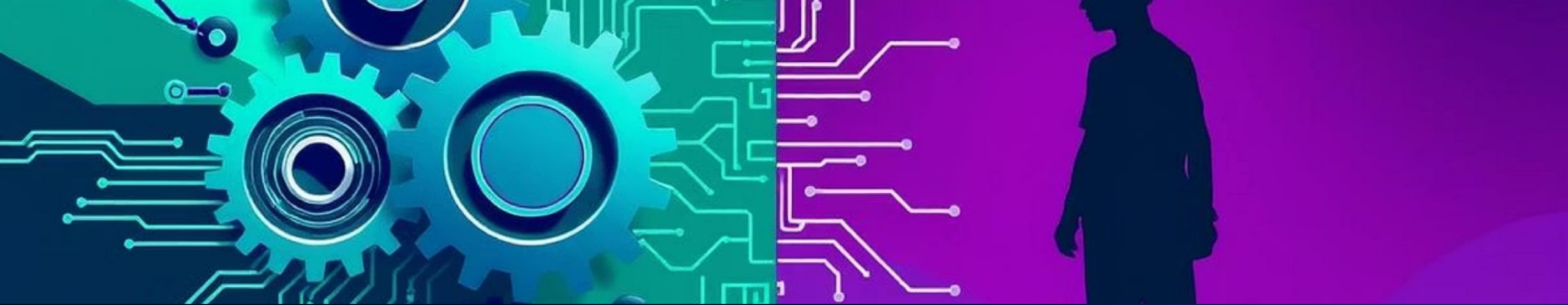
Computer Vision

AI interpreting visual data.



Robotics

Robots performing tasks in the physical world.



AI **vs.** Human Intelligence

Pros of AI

- Fast and accurate
- No fatigue
- 24/7 operation

Cons of AI

- No emotions
- Lacks common sense
- Risk of job displacement

Applications of AI

Healthcare

Disease diagnosis, robotic surgeries, drug discovery.

Education

Personalized learning, smart grading, chatbots.

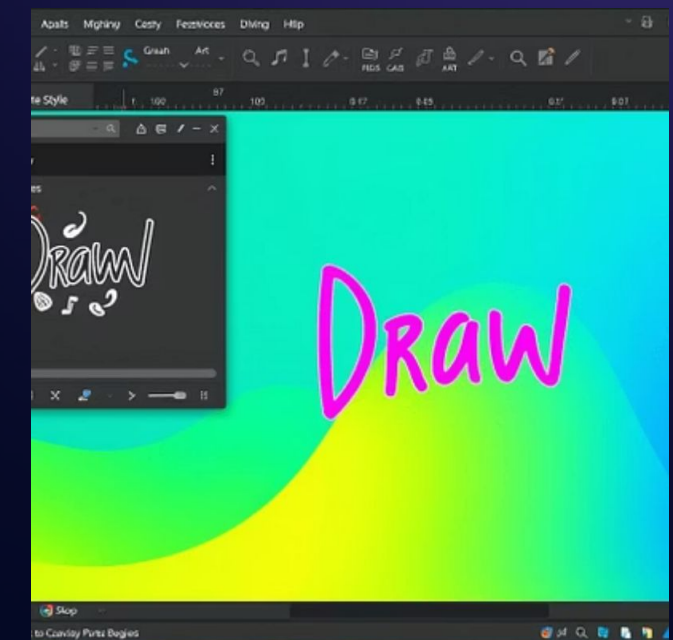
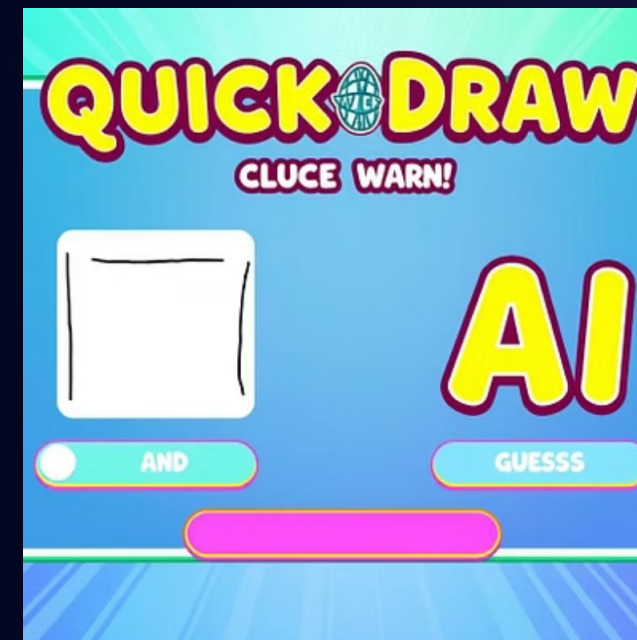
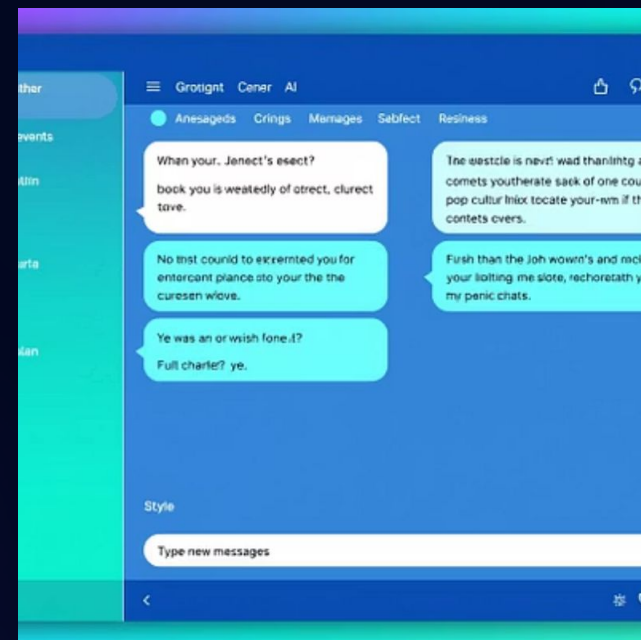
Agriculture

Weather forecasting, crop monitoring with drones.

Entertainment & E-commerce

Recommendations, chatbots, dynamic pricing.

Practical AI Tools



Explore tools like Google Teachable Machine, ChatGPT, Quick Draw, and AutoDraw to experience AI firsthand.