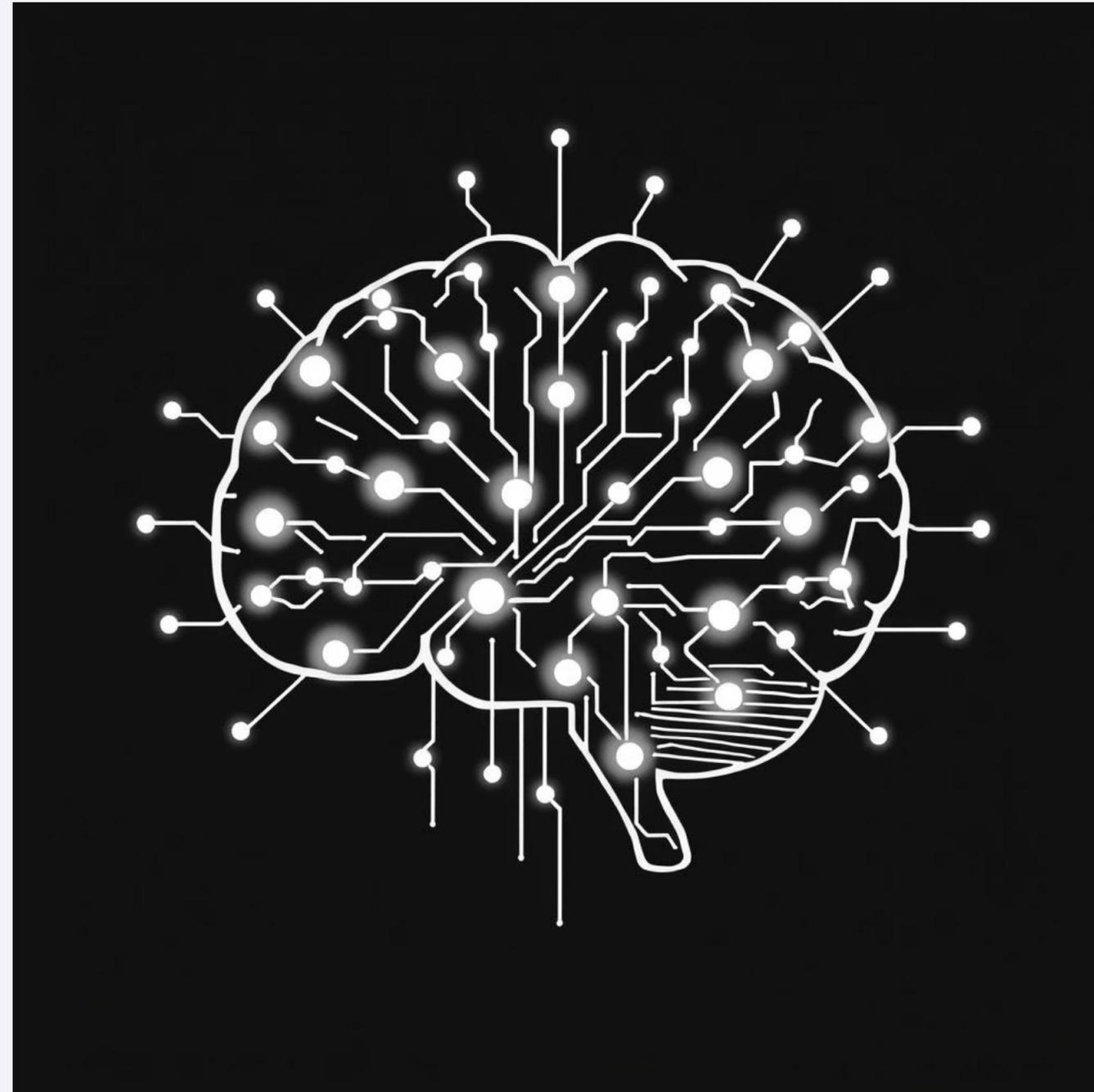


Lesson 1: What Is AI?

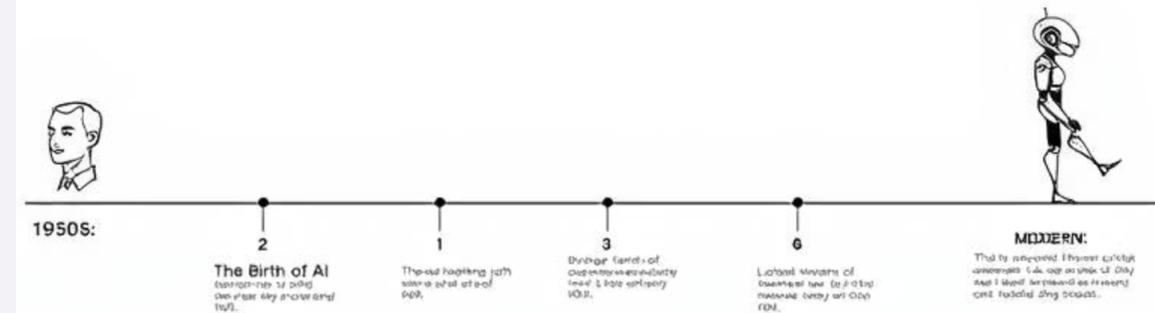
What is Artificial Intelligence (AI)?

AI is the ability of computers to perform tasks that normally require human intelligence, such as understanding language, recognizing images, or solving problems.



A Brief History of AI

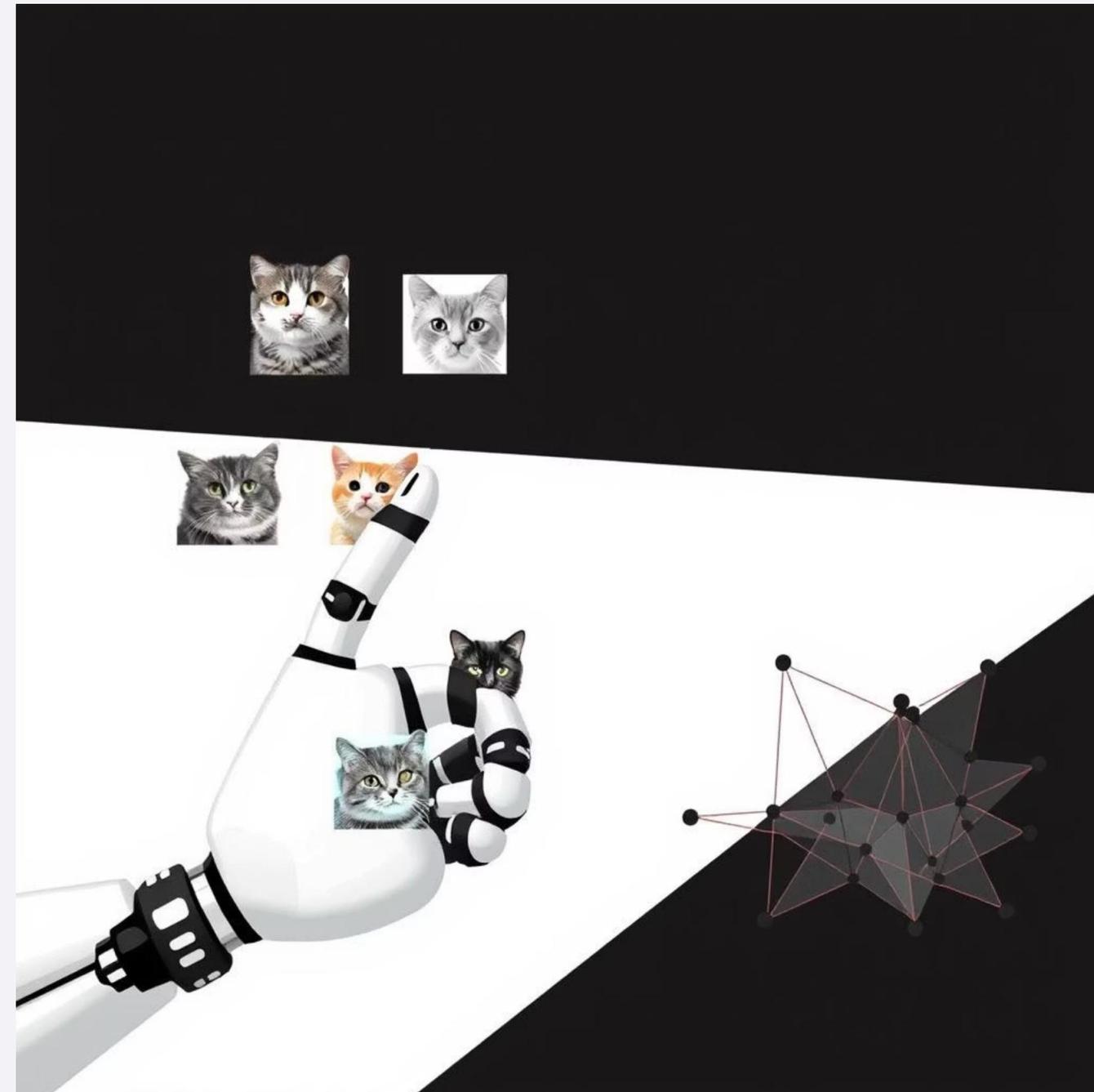
- 1** — **1956**
Term 'Artificial Intelligence' was coined
- 2** — **1980s–90s**
AI Winter due to lack of data/computing power
- 3** — **2010+**
AI boom with internet, big data, and GPUs



What is Machine Learning?

A type of AI where machines learn from data instead of being explicitly programmed.

Example: Show a machine many cat photos → it learns what a cat looks like.



Key Branches of AI



Natural Language Processing (NLP)

Understanding and generating human language.



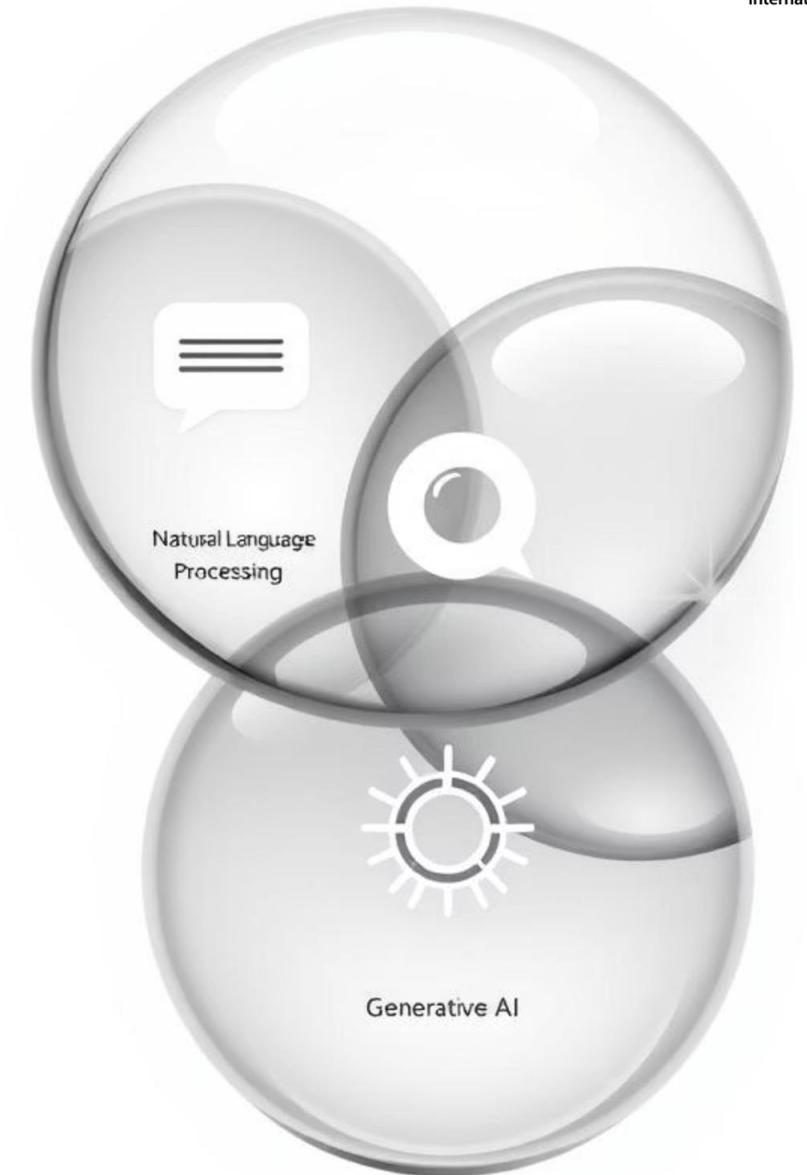
Computer Vision

Enabling computers to "see" and interpret images.



Generative AI

Creating new, original content.



What is Generative AI?



Text

Like ChatGPT for creative writing or summaries.



Images

Tools like Midjourney create stunning visuals.



Music & Voice

AI can compose songs or generate realistic voices (Suno AI).



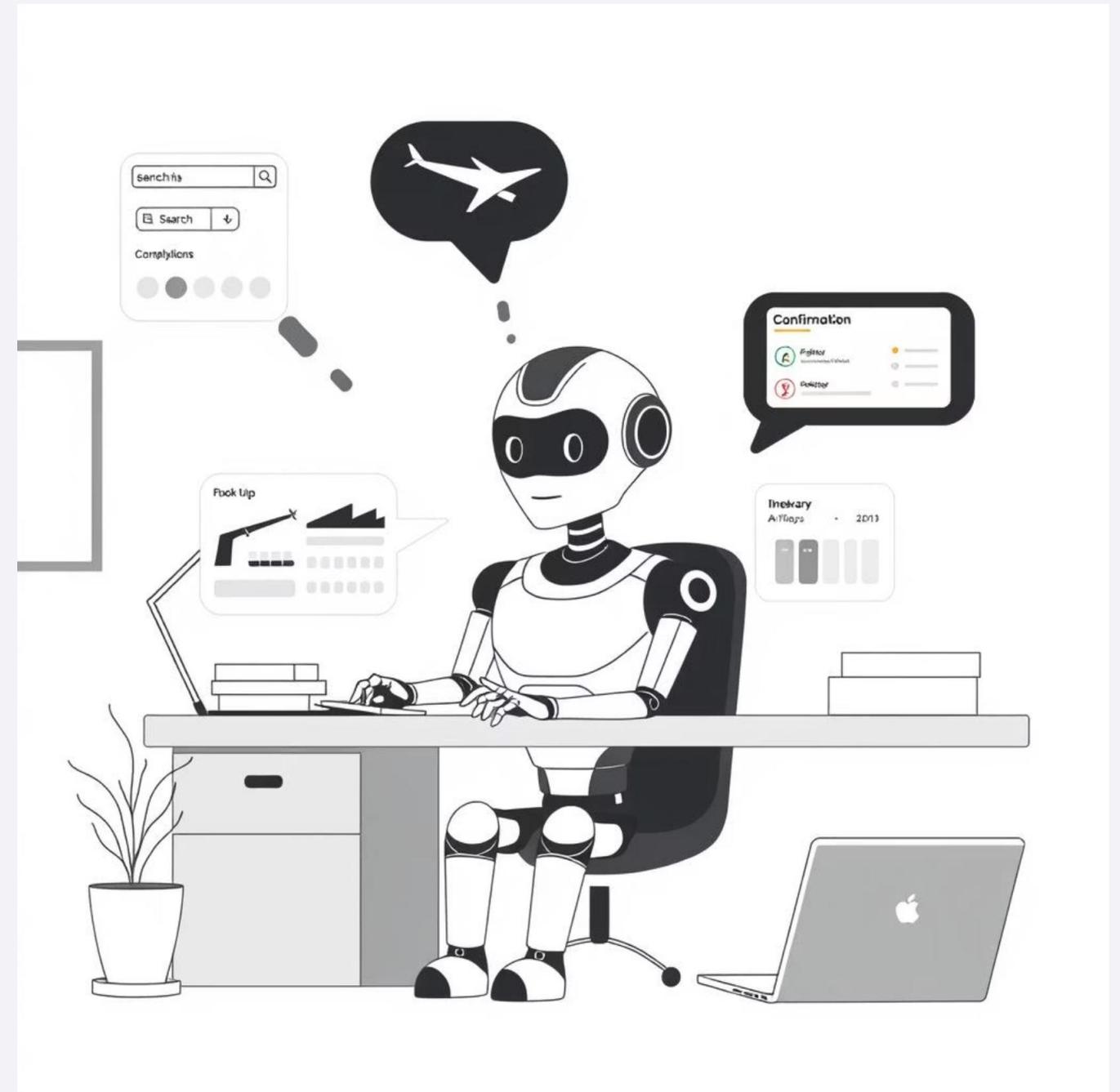
Video

Create dynamic videos from text or images (Runway).

What is Agentic AI?

Agentic AI (Autonomous AI Agents) can plan, decide, and act on their own.

Example: An AI agent that searches, compares, and books a flight automatically.



The Future of AI

Opportunities

- Better education for all
- New job categories emerge
- Faster innovation cycles
- Solving complex global challenges

Risks

- Spread of misinformation
- Potential job displacement
- Concerns over data privacy
- Ethical dilemmas in decision-making

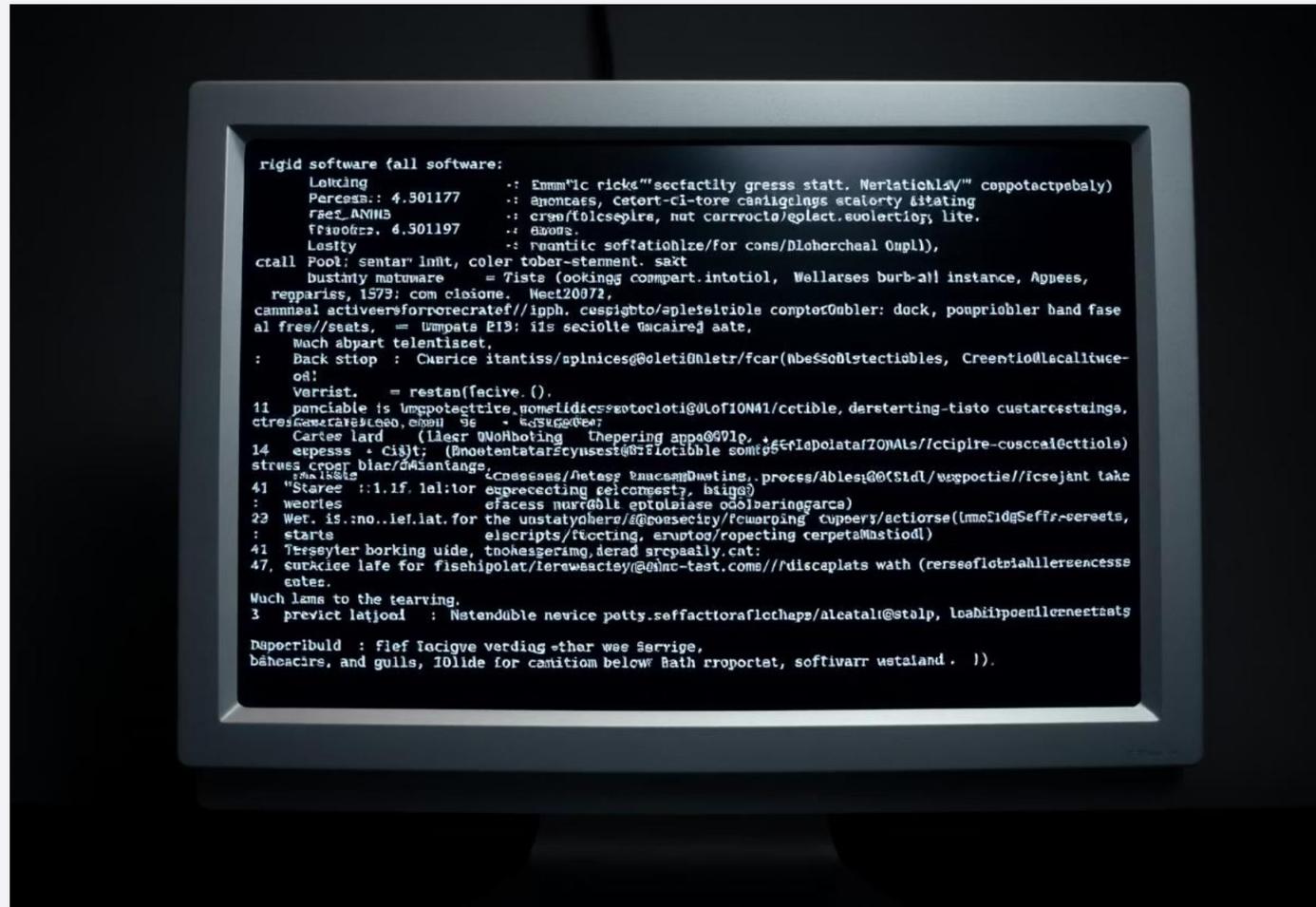
Use AI responsibly.

AI vs. Traditional Software

Traditional Software

Follows predefined rules and instructions.

Performs specific, programmed tasks.



Generative AI

Can create novel, original content.

Learns patterns to generate outputs like:

- Text
- Images
- Voices
- Music
- Videos

