



Artificial Intelligence

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Artificial Intelligence

- In computer science, artificial intelligence (AI), sometimes called machine intelligence, is intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans.
- What is AI?

2 Main Types of AI

- Narrow: interpreting video feeds from drones carrying out visual inspections of infrastructure such as oil pipelines, organizing personal and business calendars, responding to simple customer-service queries, etc.
- General: commonly seen in movies
 - HAL in *2001*
 - Skynet in *The Terminator*
 - Doesn't exist yet

Five Key AI technologies

- **Artificial Intelligence:** computers are trained to accomplish tasks by processing large amounts of data and recognizing patterns.
- **Machine Learning:** systems can learn from data, identify patterns and make decisions with minimal human intervention.
- **Deep Learning:** a type of machine learning that trains a computer to perform human-like tasks, such as recognizing speech, identifying images or making predictions.

Five Key AI technologies

- **Natural Language Processing:** NLP is a branch of ai that helps computers understand, interpret and manipulate human language.
- **Computer Vision:** a field of ai that trains computers to interpret and understand the visual world.

How Artificial Intelligence Is Being Used

- Health Care: Apps give personalized medicine and X-ray readings. Personal health care assistants can act as life coaches, reminding you to take your pills, exercise or eat healthier.
- Retail: AI provides virtual shopping capabilities that offer personalized recommendations and discuss purchase options with the consumer. Stock management and site layout technologies will also be improved with AI.

How Artificial Intelligence Is Being Used

- Manufacturing: AI can analyze factory IoT data as it streams from connected equipment to forecast expected load and demand using recurrent networks, a specific type of deep learning network used with sequence data.
- Banking: Artificial Intelligence enhances the speed, precision and effectiveness of human efforts. In financial institutions, AI techniques can be used to identify which transactions are likely to be fraudulent, adopt fast and accurate credit scoring, as well as automate manually intense data management tasks.

Is AI killing jobs?

- Actually, it added 3x more than it replaced in 2018

Definitions Page

- Neural network: a computer system modeled on the human brain and nervous system.
- Such systems "learn" to perform tasks by considering examples, generally without being programmed with task-specific rules.