

Brief History of Artificial Intelligence

Key Events in years 1950-1959

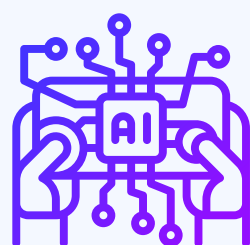
1950

English computer scientist Alan Turing published "Computing Machinery and Intelligence" and opening the doors to what would be known as AI.



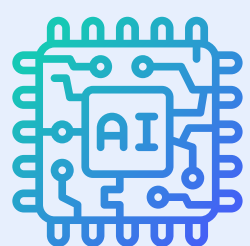
1956

John McCarthy, Marvin Minsky, Nathaniel Rochester and Claude Shannon; a group of American researchers coined the term artificial intelligence in a proposal for a workshop widely recognized as a founding event in the AI field.



1959

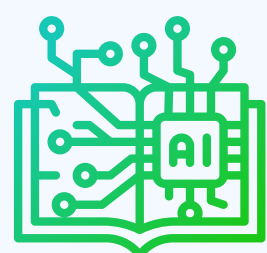
American pioneer Arthur Samuel coined the term machine learning.
Oliver Selfridge an English mathematician published "Pandemonium: A Paradigm for Learning."



Key Events in years 1960-1969

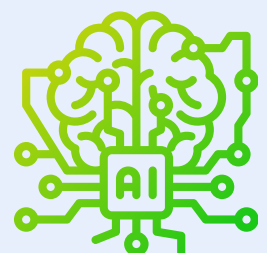
1964

American computer scientist Daniel Bobrow developed STUDENT, an early natural language processing (NLP) program designed to solve algebra word problems, while he was a doctoral candidate at MIT.



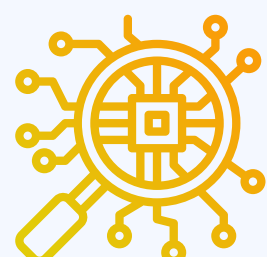
1966

Joseph Weizenbaum; a German computer scientist created Eliza, one of the more celebrated computer programs of all time, capable of engaging in conversations with humans and making them believe the software had humanlike emotions.



1968

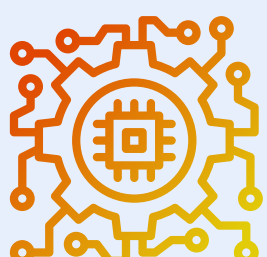
Terry Winograd an American computer science professor created SHRDLU, the first multimodal AI that could manipulate and reason out a world of blocks according to instructions from a user.



Key Events in years 1970-1979

1973

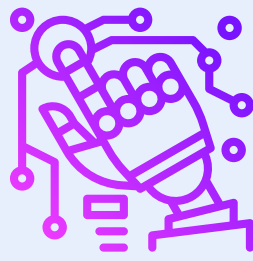
British applied mathematician James Lighthill released the report "Artificial Intelligence: A General Survey," which caused the British government to significantly reduce support for AI research.



Key Events in years 1980-1989

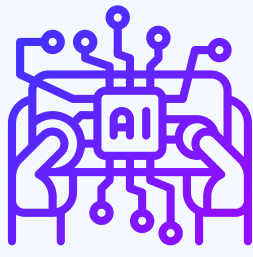
1980

Symbolics Lisp machines were commercialized, signaling an AI renaissance. Years later, the Lisp machine market collapsed.



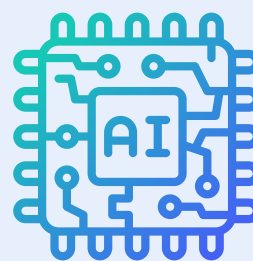
1984

Marvin Minsky and Roger Schank; American influential figures coined the term AI winter at a meeting of the Association for the Advancement of Artificial Intelligence, warning the business community that AI hype would lead to disappointment and the collapse of the industry, which happened three years later.



1989

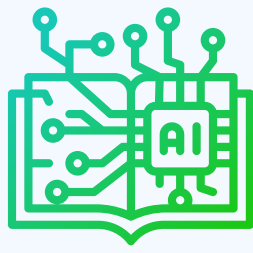
Yann LeCun a French-American computer scientist, Yoshua Bengio a Canadian computer scientist and Patrick Haffner demonstrated how convolutional neural networks (CNNs) can be used to recognize handwritten characters, showing that neural networks could be applied to real-world problems.



Key Events in years 1990-1999

1997

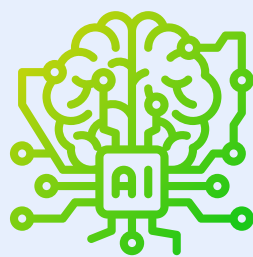
Two German computer scientists Sepp Hochreiter and Jürgen Schmidhuber proposed the Long Short-Term Memory recurrent neural network, which could process entire sequences of data such as speech or video.



Key Events in years 2000-2009

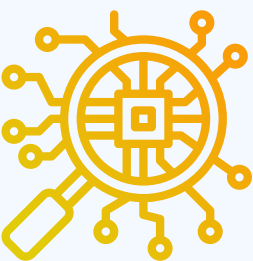
2000

University of Montreal researchers published "A Neural Probabilistic Language Model," which suggested a method to model language using feedforward neural networks.



2006

IBM Watson originated with the initial goal of beating a human on the iconic quiz show Jeopardy! In 2011, the question-answering computer system defeated the show's all-time (human) champion, Ken Jennings.



2009

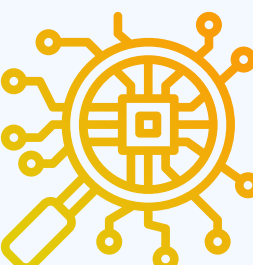
Two Indian research scientists Rajat Raina, Anand Madhavan and a British-American computer scientist Andrew Ng; published "Large-Scale Deep Unsupervised Learning Using Graphics Processors," presenting the idea of using GPUs to train large neural networks.



Key Events in years 2010-2019

2011

Apple released Siri, a voice-powered personal assistant that can generate responses and take actions in response to voice requests.



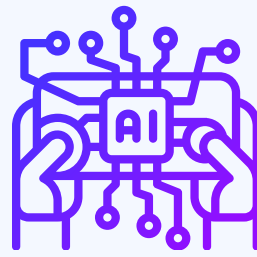
2014

Facebook developed the deep learning facial recognition system DeepFace, which identifies human faces in digital images with near-human accuracy.



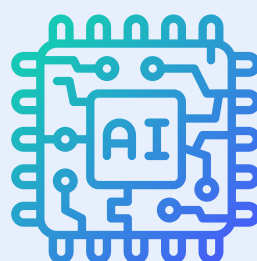
2016

Uber started a self-driving car pilot program in Pittsburgh, USA for a select group of users.



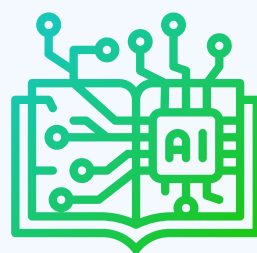
2017

British physicist Stephen Hawking warned, "Unless we learn how to prepare for, and avoid, the potential risks, AI could be the worst event in the history of our civilization."



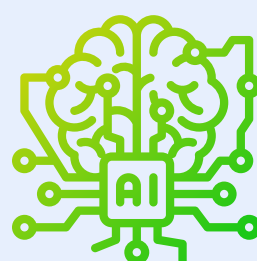
2018

Developed by IBM, Airbus and the German Aerospace Center DLR, Cimon was the first robot sent into space to assist astronauts. OpenAI released GPT (Generative Pre-trained Transformer), paving the way for subsequent LLMs.



2019

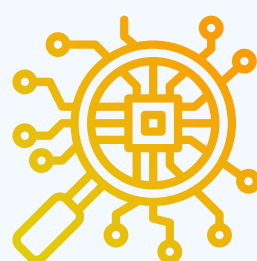
Google AI and Langone Medical Center's deep learning algorithm outperformed radiologists in detecting potential lung cancers.



Key Events in years 2020-2024

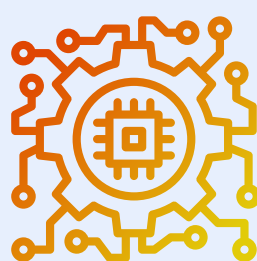
2021

OpenAI introduced the Dall-E multimodal AI system that can generate images from text prompts.



2022

DeepMind unveiled AlphaTensor "for discovering novel, efficient and provably correct algorithms."
OpenAI released ChatGPT in November to provide a chat-based interface to its GPT-3.5 LLM.



2023

OpenAI announced the GPT-4 multimodal LLM that receives both text and image prompts. Elon Musk, Steve Wozniak and thousands more signatories urged a six-month pause on training "AI systems more powerful than GPT-4."

