Artificial intelligence, or AI, is technology that enables computers and machines to simulate human intelligence and problem-solving capabilities.

On its own or combined with other technologies (e.g., sensors, geolocation, robotics) AI can perform tasks that would otherwise require human intelligence or intervention. Digital assistants, GPS guidance, autonomous vehicles, and generative AI tools (like Open AI's Chat GPT) are just a few examples of AI in the daily news and our daily lives.

As a field of computer science, artificial intelligence encompasses (and is often mentioned together with) [machine learning](https://www.ibm.com/topics/machine-learning) and [deep learning](https://www.ibm.com/topics/deep-learning). These disciplines involve the development of AI algorithms, modeled after the decision-making processes of the human brain, that can ‘learn’ from available data and make increasingly more accurate classifications or predictions over time.

Artificial intelligence has gone through many cycles of hype, but even to skeptics, the release of ChatGPT seems to mark a turning point. The last time generative AI loomed this large, the breakthroughs were in computer vision, but now the leap forward is in natural language processing (NLP). Today, generative AI can learn and synthesize not just human language but other data types including images, video, software code, and even molecular structures.

Applications for AI are growing every day. But as the hype around the use of AI tools in business takes off, conversations around [ai ethics](https://www.ibm.com/topics/ai-ethics) and [responsible ai](https://www.ibm.com/topics/responsible-ai) become critically important. For more on where IBM stands on these issues, please read [Building trust in AI](https://www.ibm.com/impact/ai-ethics).