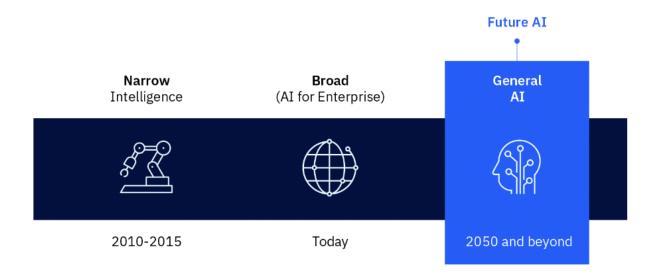


IBM ML/DL MOD5

Future AI trends

Where does AI go from here?



You live in the second level of AI, called **Broad AI**, in which machine learning systems have begun to appear in your everyday life. Broad AI can't think abstractly,

strategize, or use previous experience to come up with new, creative ideas. But data scientists and programmers are already working on the third level, called **General AI**. The goal of General AI is to create systems that can perform any intellectual task that a human being can—and more. Some scientists believe that this goal may be reached in about twenty years (the early 2040s).

What's in store for the future?

Scientists at IBM Research predict world-changing advances in AI technology and its relationship with humans. The IBM Research scientists predict that these advances will result in machine-based common sense that can help humans make better judgments.

Al everywhere

Soon, AI will support seamless connections across industries, ranging from finance, to education, to healthcare. AI will help people work more productively and create new career opportunities.

Industries:

- Healthcare
- Finance
- Agriculture
- Government
- Education
- Energy
- Science
- Business solutions

DEEPER INSIGHTS

New technologies will be able to sense and analyze things at a level of understanding that was never before possible. This includes future-forward technologies with unfamiliar names, like quantum computing. Quantum computing is a dramatically different way to calculate, based on the behavior of subatomic particles.

Technologies:

- Quantum computing
- Distributed deep learning
- Neuromorphic systems
- Homomorphic encryption
- Machine foresight
- Cognitive discovery

ENGAGEMENT REIMAGINED

New forms of human-machine communication, based on blockchain, conversational bots, and more ideas, will transform how you interact not only with your friends, family members, and coworkers, but also with machines that listen and engage in complex conversations.

Interactions:

- Human-machine collaboration
- New AI modalities
- Augmented reality
- Global trade logistics
- Blockchain for payments

PERSONALIZATION AT SCALE

Machines will interact with you in ways tailored to your particular desires, habits, and level of comfort. Today, websites already offer merchandise based on orders you've made in the past. Soon, you'll use sites that recognize you and know and understand the things you love. This includes the fashions you follow. Future sites will discuss your fashion preferences with you and offer them perfectly fitted to your size and needs.

Ways to personalize:

- Personalized healthcare
- Micro-segmentation
- Personalized finance
- Targeted marketing
- Personalized learning

- Individualized solutions
- INSTRUMENTED PLANET

Billions of sensors generating exabytes of data every day will improve the safety, sustainability, and security of our planet. You won't get caught in a surprise storm. You will enjoy food from crops grown in new ways that provide maximum taste and nutrition, with minimum damage to the environment.

Connections:

- Environmental solutions
- Digital agriculture
- Connected cars
- Geospatial temporal data and analytics
- Smart sensors

What about your future?

Take a moment to consider your personal strengths and weaknesses as a human being. Is there something you wish you could do with General Al—some kind of reasoning or understanding, beyond what you encounter today? Is there something that would bring you joy, love, or prosperity?