

# History and prospects of artificial intelligence

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**Abstract:** This article explores the history and development of artificial intelligence (AI) from ancient times to the present day. It discusses the opportunities presented by AI and highlights the normative documents related to the development of artificial intelligence in Uzbekistan.

**Keywords:** Artificial intelligence, computer, robot, cognition, economy, automation, consciousness, society, humanity, perspective, future.

The article covers key figures and milestones in AI research, including the development of machine learning and deep learning techniques. It also explores the diverse applications of artificial intelligence in fields such as medicine, transportation, and finance. Furthermore, the article discusses the potential impact of AI on society and the economy. Additionally, the paper examines the challenges and ethical concerns surrounding the use of AI, including issues related to privacy, bias, and job substitution. Overall, this article provides a comprehensive overview of AI's past, present, and future, highlighting both the opportunities and challenges that lie ahead.

The history of artificial intelligence begins at the Dartmouth Conference in 1956, where the concept of artificial intelligence was first proposed. At the conference, the ability to create and reason with algorithms for computers was discussed, which is a fundamental aspect of artificial intelligence. Various scientific advancements in automated systems used in economic, medical, and cutting-edge devices were also made during the conference.

In the 1960s, the significance of artificial intelligence further escalated. During this period, substantial efforts were made to develop expert systems, solve numerous formal problems, and create various other artificial intelligence systems. In 1960, Edward Feigenbaum and Joshua Lederberg developed a system specifically tailored to address biological problems. This system was designed for implementation in biological laboratories.

In the 1970s, collaborative experiments in artificial intelligence were conducted, further igniting interest in the development of AI systems. In the 1980s, Sun Microsystems embarked on creating desktop and remote control systems.

In the 1990s, Artificial Intelligence underwent rapid advancements and witnessed significant expansion. AI systems began to be widely utilized across various fields, including marketing, finance, medicine, and numerous others.

Today, artificial intelligence systems are highly robust and find applications in numerous fields. They are employed to address a wide range of problems, ranging from automated systems to web-based and proprietary systems. The outlook for artificial intelligence is continually expanding, with a growing emphasis on its application across various domains.

Artificial Intelligence (AI) is a powerful tool that enables humans to reimagine how we integrate information, analyze data, and utilize insights to enhance decision-making. It has already permeated every aspect of life, bringing about transformative changes.

The past decade has witnessed remarkable growth in artificial intelligence. Consumer internet companies have accumulated vast amounts of data, which has been harnessed to train powerful machine learning programs. Machine learning algorithms are now widely accessible for various commercial applications, with some being open source.

Artificial Intelligence (AI) is rapidly reshaping the world we live in and finding applications across various industries, including healthcare, finance, retail, and manufacturing. The potential benefits of AI are tremendous, but it also presents challenges that need to be addressed.

Opportunities of Artificial Intelligence: Artificial intelligence presents numerous opportunities across all fields. Some of the key opportunities that AI is poised to unlock include:

Increase productivity: AI can automate repetitive tasks, thereby liberating individuals from mundane work and enabling them to concentrate on more intricate tasks that demand creativity and problem-solving skills.

Improved personalization: AI can analyze data on consumer behavior and preferences, allowing for the personalization of products and services. This, in turn, enhances customer satisfaction and loyalty.

Better decision-making: AI can analyze vast amounts of data, identifying patterns and insights that may elude human perception. This capability enables more efficient decision-making and ultimately leads to improved outcomes.

Improved healthcare: AI can assist doctors in diagnosing diseases, analyzing medical images, and formulating individualized treatment plans.

Improving robotics: Artificial intelligence can be utilized to advance the capabilities of robots, enabling them to perform tasks in hazardous or hard-to-access environments. This includes applications in space exploration or deep-sea exploration.

AI Challenges: Despite its potential, AI presents various challenges, including:

Bias: AI systems can exhibit bias based on the data they learn from, resulting in potentially unfair or discriminatory outcomes.

Job Displacement: As artificial intelligence continues to automate an increasing number of tasks, there is a concern that it may lead to job displacement, particularly in manual industries.

Ethical issues: AI systems can make decisions with ethical implications, such as determining whom to hire or whom to deny a loan.

Lack of transparency: AI systems can be intricate and challenging to comprehend, resulting in a lack of transparency and accountability.

The Future of Artificial Intelligence: The future of artificial intelligence holds both excitement and uncertainty. As AI continues to advance and grow more sophisticated, it is bound to reshape our lives and occupations. Here are some predictions for the future of artificial intelligence:

More personalization: AI will become increasingly personalized, with systems capable of anticipating our needs and preferences even before we are aware of them.

Advanced automation: AI automates a greater number of tasks, leading to enhanced productivity.

Improved healthcare: AI will continue to advance the field of healthcare by developing systems capable of predicting and preventing diseases.

Expanding collaboration: Artificial intelligence will foster increased collaboration between humans and machines, resulting in more efficient problem-solving.

New industries: AI will create new industry and job opportunities, including fields such as ethics and AI regulation.

In the Republic of Uzbekistan, several initiatives are underway to promote the development of artificial intelligence. One notable example is the decision of the Cabinet of Ministers of the Republic of Uzbekistan dated July 31, 2021, titled "On the establishment of the research institute for the development of digital technologies and artificial intelligence." Additionally, on February 18, 2021, the President of the Republic of Uzbekistan issued a decree titled "On measures to create conditions for the rapid introduction of artificial intelligence technologies." Furthermore, the Decree of the President of the Republic of Uzbekistan No. PF-6079 dated October 5, 2020, titled "On approval of the Digital Uzbekistan - 2030" strategy and measures for its effective implementation, serves as another example.

**Conclusion:** Artificial intelligence presents significant opportunities and challenges for our society. It is crucial that we carefully consider the ethical and social implications of AI as it continues to integrate into our lives. With appropriate regulation and oversight, AI has the potential to be a formidable force for positive change, enhancing our lives and contributing to human progress.

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