

Abstract

Artificial intelligence (AI) has become one of the most important technologies in the modern digital era. With the rapid development of big data, computer algorithms and computing power, artificial intelligence is widely used in education, industry, medical treatment and daily life. This paper briefly introduces the basic concept of artificial intelligence, analyzes its application value and discusses its future development trends and existing challenges.

1. Introduction

Artificial intelligence refers to the technology that enables machines to simulate human thinking, judgment and learning abilities. In recent years, generative artificial intelligence and large language models have developed rapidly. Intelligent machines can independently complete text creation, data analysis, language translation and logical reasoning. Different from traditional computer programs, modern AI has strong self-learning and adaptive capabilities, which greatly improves social production efficiency.

2. Main Applications of Artificial Intelligence

First, AI improves office and work efficiency. Many intelligent tools can automatically generate documents, sort data and optimize work processes, which reduces repetitive labor. Second, artificial intelligence promotes the development of education and scientific research. It provides personalized learning guidance and assists researchers in data statistics and paper analysis. Third, AI plays an important role in industrial production and intelligent detection. It can monitor equipment status, predict risks and ensure production safety. In addition, intelligent voice interaction, intelligent recommendation and automatic driving have gradually changed people's daily life.

References

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