

# Artificial Intelligence: Current Trends, Advantages, and Future Potential

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**Abstract:** *Artificial Intelligence is an interdisciplinary field that combines Machine Learning, Big Data, Cloud Computing, and Information Theory. The major advantage of machine learning is that it builds on prior experience, so machines are self-learning and can predict the future without error. It is a kind of decision-making approach that is applied in various domains like social media, health care, finance, etc. In Big Data and Cloud Computing, the volume of data is sustainable and increasing, which is processed with low power consumption with the help of machine learning. It is possible to support the next generation of smart grid by providing the platform that integrates, in addition to the communication infrastructure, the AI and IoT support, providing a multitenant system, thanks to the future Massive Internet of Things (MIoT), one of the pillars of the 5G/6G network factory. Rapid development in Deep Learning, Artificial Intelligence (AI) and Machine Learning (ML) will give better results for future applications. This paper focuses on the trends and challenges related to AI is discussed.*

**Keywords:** Machine learning, decision making, self learned, low consumption