



Artificial intelligence: Who must have autonomy the machine or the human?

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Artificial intelligence (AI) is intelligence demonstrated by machines. The main goal of AI is not to replace healthcare professionals, but to enable better patient experience and better inform the clinical decision-making process to improve the safety of patients and reliability of clinicians. The main principle is based on the following assertion: computers can precisely mimic cognitive functions of human beings such as learning and problem solving.^[1]

The deep learning methods are promising support tools in automated control of cervical graphs using the deep convolutional neural networks (DCNN) and the exclusion of normal graphs. Such a supportive tool may reduce the diagnosis time and provide radiologists or clinicians to have more time to interpret abnormal graphs.^[2]

Another study results suggest that deep learning methods may be a beneficial assistant

for evaluation of femoroacetabular impingement (FAI); it can help healthcare professionals in the early diagnosis of FAI syndrome.^[3]

Can AI learn without human input? No, AI processes data that humans enter into the system. Therefore, the AI technology is still far from achieving human-like intelligence without the help of humans. Machines can only deliver value as long as there are humans behind them.^[4]

What is autonomy in AI? Autonomous AI is defined as routines designed to allow robots, cars, planes and other devices to execute extended sequences of maneuvers without guidance from humans.^[5]

What are the three rules for robots? A robot may not injure a human being or, through inaction, allow a human being to come to harm. A robot must obey orders given it by human beings except where such orders would conflict with the First Law. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.^[6]

In conclusion, are machines better than humans? Computers start with many advantages. They have better memories, they can quickly gather information from numerous digital sources, they can work continuously without the need for sleep, they do not make mathematical errors, and they are better at multitasking and thinking several steps ahead than humans.^[7] Can human being be replaced by machines? Many scholars indicated that machines can only replace humans in repetitive low-skill, complex non-creative and dangerous tasks in manufacturing processes. Humans are needed in high-skilled innovation and critical decision-making jobs, as well as in fields that require emotional intelligence.

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