

The Future of Artificial Intelligence and Robotics

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1 Abstract

The future of artificial intelligence (AI) and robotics is a dynamic and rapidly evolving domain, presenting swift advancements and potential transformative impacts across various sectors. This article explores anticipated trends and progress in AI and robotics, highlighting their potential implications on society, the economy, and employment. Key areas of focus encompass enhanced human-machine collaboration, ethical considerations,. Furthermore, this abstract discusses the integration of AI and robotics into daily life, with a particular emphasis on applications in healthcare, education, and creative domains. The societal and economic effects, including workforce transitions, ethical guidelines, and the necessity for inclusive growth, are also examined. A proactive approach to regulation, education, and the responsible development and deployment of AI and robotics is imperative to harness the benefits and mitigate potential challenges in this evolving landscape.

2 Implications AI and robotics on economy

AI and robotics are technologies that can perform tasks that normally require human intelligence or physical abilities. They can increase productivity, efficiency, innovation, and quality in various sectors and industries. They can also create new markets, products, and services that generate new revenue streams and consumer demand.

However, AI and robotics also pose some challenges and risks for the economy and society. They can disrupt existing business models, industries, and countries, creating winners and losers in the process. They can also affect the labour market, changing the demand and supply of skills, wages, employment, and income distribution. They can also have ethical, social, and environmental implications that need to be addressed.

3 Implications AI and robotics on employment and society

AI and robotics may have bad impact on employment. For example the video game "Detroit: Become Human" provides an interesting and thought-provoking narrative that illustrates some implications of AI and robotics on employment and society. In the game, AI-driven robots called androids have become an integral part of society. Here are a few key examples from the game and how they relate to real-world implications:

- In "Detroit: Become Human," androids have taken over many jobs, leading to job displacement for human workers. For example, androids serve as caretakers, customer service representatives, and laborers. This reflects a real-world concern about how AI and automation can displace human workers in industries like manufacturing and customer service.
- Reskilling and Adaptation: In "Detroit: Become Human," some humans reskill and adapt to new roles or form movements to protect human jobs from androids. This highlights the importance of education and training for workers to adapt to changing job markets, a real-world implication of AI and automation.

With the development of artificial intelligence, the number of jobs for people will steadily decrease, and this process may cause great problems in the future. In the history of the earth, this has already happened. The most famous example of this is the industrial revolution in the 19th century in Britain

4 Implications AI and robotics on education

The integration of AI and robotics in education has the potential to revolutionize the learning landscape by equipping students with essential skills and preparing them for a future where AI and robotics are integral to their lives. According to a recent article on AI for Good, educational robotics can serve various purposes in enhancing learning experiences. They can promote active engagement, problem-solving, and collaboration among students as active learning tools. By introducing robotics in the classroom, children can develop their critical thinking and creativity skills. Robots can also serve as a scaffold for developing social skills, especially for shy children or those with special needs. Interacting with robots can be less intimidating and more predictable than interacting with peers, fostering confidence in social situations. Additionally, robots can act as co-learners or tutors, encouraging children to explain concepts or teach the robot, thereby reinforcing their own understanding.

However, there are challenges that must be addressed to make educational robotics accessible, affordable, and effective in classrooms. Two primary barriers hinder the widespread adoption of robots in classrooms: cost and teacher

training. Schools often have limited budgets, making it difficult to invest in expensive robotic equipment. The high cost of advanced robotic systems may exacerbate the digital divide between schools with access to resources and those without. Furthermore, teachers may lack the necessary time and training to effectively integrate robotics into their curriculums. With an already packed schedule and curriculum demands, incorporating robotics can be a daunting task for educators.

Addressing these challenges requires the development of better teacher training programs and government support for prioritizing robotics and AI in education. By recognizing the importance of these technologies for the future workforce, governments can promote the adoption of educational robotics.

5 Ethical considerations with implementing AI and robotics in daily life

References

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