

The emergence of robot soldier technology in modern warfare is a complex and multifaceted topic, and comes with its own unique opportunities and risks. This reflection aims to shed light on the various aspects of the aforementioned opportunities, risks, and choices posed by robot soldiers, focusing on their impact on human lives, autonomy, accountability, and the broader implications for society.

As we have previously explored, autonomous soldiers offer many undeniable advantages if used correctly, boasting enhanced precision and efficiency, the ability to minimize risk of human casualties, versatility, and endurance in prolonged missions.

Robot soldiers present the opportunity for increased operational efficiency and precision on the battlefield. Their ability to operate and perform consistently without fatigue, emotions, or personal biases allows them to execute their missions with utmost precision and accuracy. They are also equipped with various different advanced sensors, machine learning algorithms, and data analysis capabilities, which grant them the ability to instantaneously assess complex situations, leading to faster decision making and increasing operational tempo, allowing them to swiftly dominate the battlefield.

Implementing the use of robot soldiers can also significantly reduce the risks faced by human soldiers in combat scenarios. By substituting or supplementing human soldiers with robots, we have the potential to save countless lives, protecting individuals from the intrinsic dangers and life-threatening situations of warfare. This can be seen with robots such as the Talon robot, which is primarily used to detect and dispose of bombs in place of humans, consequently minimizing the risk of human casualties and maximising operational efficiency.

Additionally, being devoid of emotions and personal biases, autonomous robot soldiers also have the potential to act consistently within ethical guidelines or legal frameworks. They can adhere to programmed rules and objectives, reducing the risk of morally “incorrect” decisions made in the heat of battle.

Despite the countless advantages and opportunities presented by the development and integration of this technology, it also comes with its fair share of risks and raises some important ethical questions.

One of the fundamental risks of relying solely on robot soldiers is their limited capacity for human judgment and broader contextual understanding, leading to a “dehumanization” of modern warfare. Because robot soldiers are unable to feel human emotions and empathy, it is hard to trust them to be able to make ethical decisions. Robot soldiers may struggle to comprehend the subtleties and inherent nuances in warfare, which can potentially lead to them carrying out inappropriate or morally questionable actions.

This in turn raises concerns regarding accountability and responsibility for these actions. As things currently stand, human soldiers are able to be held accountable for their actions under existing legal frameworks and ethical guidelines, with appropriate consequences for violating either one. However, in the case of a robot soldier breaching said codes of conduct, we are faced with the issue of accountability. It is difficult to pinpoint if the responsibility falls on robot soldiers, their operators, or the organizations themselves. Decisions must be made regarding the delegation of responsibility, liability, and appropriate legal consequences in the event of errors, accidents, and ethical breaches.

Reflecting on these points from a computer ethics perspective, it is clear that autonomous robot soldier technology has the potential to revolutionize the way modern warfare is fought, and could transform the world as we know it. However, when developing these systems, it is crucial that the engineers, data analysts and all those involved with its evolution are well versed of the potential risks that come with it. For example, a cyber soldier agreement should be brokered which detail specific guidelines for programming robot soldiers, including who should be assigned responsibility in the case of a framework violation, as well as defining the line between reliance and overreliance of this technology. Such risks should be on everybody's mind as the technology advances.

During this assignment, my team and I were able to work together very efficiently. From the beginning, we clearly defined what technology and topic we wanted to dive deeper into, and what roles each of us should have. Over the course of 6 weeks, we were able to obtain a greater understanding of our chosen topic thanks to our collaborative efforts. In my opinion, we worked very well as a team, as we had great chemistry and communication, and were able to distribute our roles and responsibilities easily, which we all were able to carry out individually and in a timely manner.

Though we worked well as a team, we did face some issues. For example, there were times when we were confused or stuck on what our task was, however we were always able to settle these problems by communicating and going through things together. However, I do believe that this project could have been handled a bit more responsibly and effectively. This is because while we certainly were able to work well while we were together, we mostly met during our lab time and barely had any conversations outside of class. This is partly because we all had different schedules, but also because we never made any real attempt to have external discussions or meetings. If I had to complete this project again, I would make sure spend more time with my team outside of class and to communicate with each other more often, and make sure that our tasks are completed to the best of our ability.