Stage Two (Draft Project Proposal)

Group 0517 (Trevre, James, Patricia)

Autonomous Robot Soldiers

Brief:
In recent years, technology has played an increasingly significant role in warfare, with notable advancements in artificial intelligence (AI) leading to reduced human involvement on the front lines. AI has found numerous applications in warfare, one of the most noteworthy examples being the development of autonomous robot soldiers. These cutting-edge machines are trained and use machine learning to surpass their human counterparts on the battlefield.

In the United States, 1000 active-duty military deaths occurred on average each year from 2010 to 2021. These deaths were caused by various reasons, most significant being accidents caused by human error, hostile action, and illnesses (DCAS, 2021).

Autonomous robot soldiers continue to improve thanks to the rapid development of AI and the technology used to construct these machines. Being able to deploy fully capable robot soldiers in place of human soldiers would significantly reduce the death toll in future conflicts. "A UK intelligence officer described the US Army's goal as having more combat robots than human soldiers by 2025" (Baecker, 2019).

However, robot soldiers do have multiple risks and technical challenges. 'Discriminating among targets. Some experts contend that it is simply too difficult to design a machine that can distinguish between a combatant and a non-combatant' (Lin, Bekey & Abney, 2008). The security of autonomous robot soldiers on the battlefield also raises concerns, as they are susceptible to hacking or reprogramming.

While the potential benefits of autonomous robot soldiers are significant, there are also concerns about the ethical implications of using machines to make life-and-death decisions on the battlefield. As we continue to explore the possibilities of autonomous warfare, it is essential to consider the impact on human lives and the wider implications for society.

Group Roles:

- Trevre – Writer
- James – Web designer
- Patricia – Research, Proofreader

GitHub:

- https://github.com/tobsywobsy/COMP501-Assignment-3

Sources

- https://apps.dtic.mil/sti/pdfs/ADA534697.pdf
- https://dcas.dmdc.osd.mil/dcas/app/summaryData/deaths/byYearManner
- https://canvas.aut.ac.nz/courses/14937/pages/week-7-computers-and-society?wrap=1
- https://apps.dtic.mil/sti/pdfs/ADA541977.pdf
- https://library.oapen.org/bitstream/handle/20.500.12657/47279/9783030541736.pdf?sequence=1#page=131