

Robotics Ethics paper

Due: Wed April 26th in class

Summary and Thesis:

The field of Robotics brings up new ethical and legal questions not faced by other disciplines. When teleoperated robotic surgery goes wrong, where is blame assigned? Is it the surgeon's fault? Was it lag between the surgeon's console in Boston and the robot in Antarctica? Was it the robotic hardware? Was it the software? Putting robots into a position to affect people's lives (and harm them in particular) adds to the ethical responsibilities of both those who design the robots and those who use them. If a military robot is used to train a gun on a group of enemy soldiers who have surrendered, and then a software or hardware glitch causes the robot to fire, does the soldier who used the robot to aim the gun in the first place bear any blame?

Deliverable:

Write a (four pages not counting references, double spaced) paper on the ethics of using and designing robots in potentially dangerous situations. Use our class news and your own literature search to answer one of the following questions: (don't rely just on the links here in the document, find your own too)

1. Robotics has always been pushed for jobs that were one of the "3 Ds - dirty, dull, dangerous". Today we have robots that can dance and play soccer. We have teleoperation capable of letting an operator run a robot half a world away. How will this effect labor markets in the United States and elsewhere? NAFTA 2 has strict 'country-of-origin' rules, will tele-operated robots that are operated overseas but build things in North America pass muster? Will we see prisoners operating snowplows via remote control? Will labor laws have to be changed? How will the use of robots affect social structures and labor markets here and abroad? Defend your answer with facts, history, precedent and references.
2. (Note, as of when I added them all links are acceptable for broadcast television, but given the nature of the topic I can't guarantee they will stay that way, if this bothers you, pick one of the other topics) I've skipped this in class, but something being discussed by ethicists a lot is the intersection for robots and sex. Given what has been discussed in academia and the media about the seedier side of 'sex robots' should we ban them? Can we ban them? Years ago there was a big controversy because a product called the *Roxxy True Companion* created controversy because one of its AI modes was called 'reluctant mode' which was just as problematic as you probably imagine. In more recent years there have been a number of companies that will take photos and create a robot customized based on photos of a real person
<https://www.myrobotdoll.com/collections/create-your-sex-doll>
Officially this is to help grieving survivors when a spouse dies:
<https://www.thesun.co.uk/living/4230725/sex-robots-dead-wives-customisation/> but it is not a stretch to think that this might be abused. A couple of related article
 - <https://builtin.com/robotics/sex-tech>
 - <https://www.dailystar.co.uk/news/weird-news/hi-tech-sex-robots-see-24255657>

3. Consider the challenge of putting robots to work with humans. I've seen robot ethicists say that we shouldn't have humanoid robots because they mostly take advantage of our human nature to make us buy more stuff. We looked at such robots this semester and how close they are to crossing the uncanny valley. Should we allow humanoid robots? Or limit robots to non-human shapes best suited to their individual jobs.

<https://www.bbc.com/news/business-48994128>

<https://www.smithsonianmag.com/science-nature/how-humanlike-do-we-really-want-robots-to-be-180980234/>

4. I used to ask if human should have armed robots, nearly all students said no. I don't ask that any more because we've had armed robots for years now. Consider the war robots videos I put in the news channel. The fictional "slaughterbots" <https://www.youtube.com/watch?v=9CO6M2HsoIA> one was done by Russel (of Russel and Norvig) who literally wrote the book on AI. He and several dozen other AI and robot researchers went to the UN a few years ago to try to get Autonomous Armed robots banned. They were well received by many countries, but in the end got nothing done. Should we ban autonomous armed robots like we have mustard gas? Can we? How about killer/lethal robots for domestic security:

<https://www.newyorker.com/news/daily-comment/should-local-police-departments-deploy-lethal-robots>

<https://www.oikoumene.org/news/how-to-stop-killer-robots-technology-is-outpacing-diplomacy-at-un-talks>

<https://www.politico.com/newsletters/digital-future-daily/2023/02/07/killer-robot-swarms-an-update-00081623>

5. Should robots be taxed? As robots move into more and more jobs, that means that countries like the US which rely heavily on income tax are losing tax base. Some have suggested taxing robots to make up the difference, or even provide for humans who no longer have a job. On the other side of the debate, there is the notion that in the globalized world we have lived in for the last 30 years, the robots might just go offshore to a place where they are not taxed, so explore this question and answer it.

<https://news.mit.edu/2022/robot-tax-income-inequality-1221>

<https://www.brookings.edu/research/tax-not-the-robots/>

<https://blogs.lse.ac.uk/businessreview/2022/11/24/should-machines-be-taxed-like-people/>

Write this as a scholarly paper, that is if there is anything that everyone in the class isn't expected to know, if you make the claim, you must provide a reference to back up the claim. All references must be listed on a fifth page of the paper. Use whatever reference style you want so long as you are consistent. If you copy and paste anything from anywhere into your paper it must be in quotes and referenced immediately afterwards. If you are reporting a paragraph that makes several claims that can be backed up by a single reference, feel free to wait to reference it till the end of the paragraph. It goes without saying but standard business English syntax and grammar are required.