Mini Project 03

Project title: Ethical Dilemma

CSE487

Cyber Security, Law & Ethics

Section: 01

Group: 114

Submitted by:

1. Sadia Afrin (Id: 2019-1-60-173)

2. Maliha Mohasin (Id: 2019-1-60-171)

3. Nafisa Binte Nayeem (Id: 2019-1-60-172)

Submitted to:

Rashedul Amin Tuhin

Senior Lecturer

Department of Computer Science & Engineering

East West University

Date of Submission: 20/05/2023

AI Robot for Human Security

China has been a leader in deploying AI robots for security purposes. The country has extensively utilized AI-powered robots in various public places such as airports, train stations, and shopping malls for tasks like surveillance, crowd monitoring, and security patrols. These robots are equipped with advanced sensors and computer vision technology to detect suspicious activities, identify individuals, and ensure public safety. These robots are designed to interact with people and provide information or instructions in multiple languages, including English which international visitors or individuals who are more comfortable with English. China launched a plan last year to deploy artificial intelligence-powered robotic cops in most cities by 2025.

Scenario

In a bustling city street, an autonomous police robot is deployed to monitor and identify potential criminals and rule breakers in a diverse crowd doing its regular duty. But suddenly it becomes alerted to two men who is wearing a black hat, sunglasses and coat who display anxious expressions on their faces. Acting promptly, the robot approaches the pair, following its programmed procedure of checking those men's identity and belongings first, then utilizing its database for verification. If it finds something fishy it will take those men in its custody.

Ethical dilemma

Advancements in robotics come with their own set of challenges and ethical dilemmas, despite the intention to improve human lives. Safety is a crucial aspect to consider, especially when deciding who should be held accountable if a person's well-being is compromised by a robot. It is important to address the potential negative outcomes associated with robotics and establish responsibility for any harm caused. Striking a balance between progresses and ensuring safety is key in navigating the complexities of robotics.

As we can see our scenario a police is programmed for human security where it have to check random strangers identify to be ensure if that stranger people can be consider as criminal or not. Without doing it, robot and human authors who have designed that can't ensure its doing its job correctly or not. But checking random people's information sometimes can be quite irritating for some people.

Still they have to give information "Is it okay to force someone one to give information, doesn't it take privacy right from humans?"

Again "Who will be responsible if an AI robot makes an incorrect identification or uses excessive force becomes challenging?" which potentially leading to legal and ethical challenges.

Deploying AI robots for security tasks raises questions about the level of human control and decision-making in critical situations "Will it be okay give them full control for taking decision?"

Brainstorming Phase

1. Stakeholders:

- a) Netizens
- b) Police robot
- c) Company that develop this kind of robot
- d) Government
- e) Police department of china

2. Risks, issues, problems, and consequences:

There can be many risk will arise if we use robot as police instead of human. Such as, if the police robot collects a lot of information about each person's personal, banking, and social activities. So, it raises concerns about privacy and freedom of the netizens. Again when AI robots are involved in decision-making processes that impact human security, issues of accountability and liability can emerge how people can trust a technology to judge. Moreover, there is very crucial risk if we human give robot taking important decisions or we can say full control of a duty they can takeover according to the viral robot from Hanson Robotics, Sophia, said that humans create technology's problems. The advanced AI robot got famous for becoming the first world citizen and once threatened to destroy humankind.

3. Who gets each benefit:

The implementation of police robots offers enhanced security for netizens, protecting them from unethical individuals who disregard rules. These robots possess advanced computational capabilities, enabling them to swiftly identify individuals from a database and operate with greater speed than humans. Consequently, fewer person will be required in a single position, benefiting both the police department and the robot provider, who can generate profits by selling their robots.

4. Possible actions:

The possible actions which can be taken are very limited here.

- a) AI will detect criminals properly.
- b) Otherwise it cannot detect unethical people as planned.

Analysis Phase:

1. Responsibilities of the decision maker:

In the described scenario, the autonomous or robotic police system relies on the decisions made by the programmer who designed it. This programmer has the responsibility to consider both general and professional ethics while making decisions about the system's operations, such as when to stop, provide information, or handle criminals and rule breakers. Acting in the public interest, the coder must prioritize the well-being of all stakeholders, avoiding robots autonomy and negative impacts on society. Fairness, honesty, trustworthiness, and nondiscrimination are important ethical principles to uphold. Furthermore, professional ethics entail welcoming feedback and criticism from stakeholders, conducting comprehensive analyses of system impacts, and addressing potential dangers. Developing a reliable and secure system is also crucial to ensure its effectiveness and safety.

2. Identify the rights of stakeholders:

Our stakeholders include netizens, the police robot, and the company developing the robot, the government, and the Chinese police department. It is imperative that robots and AI systems do not engage in harmful activities. Safeguarding human privacy is a fundamental right for all netizens, and the AI system must prioritize privacy protection. The company responsible for building the AI system and police robot has the authority to utilize their products for beneficial purposes, but it must ensure that their products are not misconduct in any way. If any netizens experience harm caused by the police robot, they are entitled to seek compensation for damages incurred.

3. Impact of the action options on the stakeholders:

Impact options for stakeholders have both positive and negative issues. Day by day, technology is more updated. The main goal of technology is to remove the suffering of humans. An AI- based robot is stronger and faster than humans. In a given scenario, the robot police is doing its job programmed by the robot making company developer.AI machines will not be 100% accurate. When AI robots are involved in decision-making processes that impact human security, issues of accountability and liability can emerge. Determining who is responsible if an AI robot makes an incorrect identification or uses excessive force becomes challenging, potentially leading to legal and ethical challenges. So these action of robot confines the developer to risk. Again, when the robot checks one's ID card, it can scan it easily and find the all information of the detected human. The privacy of that person will be hampered. Ethical considerations arise regarding the extent to which humans should retain authority over AI robots and their actions, particularly when it comes to the use of force or making crucial judgments. This action confines china's police department and government to the risk.

4. Analyze consequences, risks, benefits, harms, and costs for each action considered:

Using robots as police instead of humans comes with numerous risks. For instance, if police robots collect extensive personal, banking, and social information, it raises concerns about the privacy and freedom of individuals. This may lead people to devalue the robot's importance if their rights are compromised. Additionally, when AI robots are involved in decision-making processes that affect human security, questions of accountability and liability arise, making it difficult for people to trust technology to make fair judgments. Moreover, there is a significant risk if humans entrust robots with important decisions or complete control, as they can potentially take over. An infamous example is the advanced humanoid AI robot gained recognition as the first "world citizen" but also posed a threat to humanity. While humanoid police robots and powerful AI systems offer advantages, there are situations where they may not be suitable. Humans have the ability to think broadly, while AI has limitations. It remains uncertain whether these limitations are solely technological or extend beyond the current capabilities of robots.

5. Kant's, Mill's, and Rawls' approaches:

According to Kant's "Categorical Imperative" philosophy, one should not make a promise that he intends to break later unless he is willing to have everyone else do the same. One should always respect the humanity of others, and one should only act following rules that could hold for everyone. Kant is a supporter of the Universal Moral Law. These are the standards that apply to everyone, everywhere. In our scenario, sometimes robots are a danger to humans if they make a wrong decision or machine malfunctions. Then it will pose a risk to humans. Robots don't provide security for everyone. But Kantianism supports moral rules. If he is the creator of that robot, then he will try to ensure everyone's safety. Maybe, if a robot detects someone innocent and got jailed for its mistake, people will call the robot creator to stop its functionality or try to break its system. In this incident, one will get a punishment that they don't deserve and the criminal will be safe. But Kant will not allow one to punish to save another. Because punishing someone innocent to save another is always wrong in its ethicist view. Also, we can't rely on robots completely and can't break others' rights. We can't break into others' personal information without asking them. So Kant's approach will not support any part of our scenario.

Mill's "Utilitarian Theory" states that we should choose actions that produce the greatest good for the greatest number. In utilitarian terms, we should choose the option that "maximizes utility," meaning the action or policy that produces the largest amount of good. In our scenario, if the robot detects innocent someone for its mistake, the human will try to break its system. Although one person gets punished in the incident, the rest will be safe. This supports the theory of utilitarianism. As robots are trained that way, they focus to spot criminals. Finally, if we collect information using informed consent paper, it will bring good for the majority. The utilitarian takes action that will produce the most overall happiness for a group, even if it produces less happiness for some. In this case, Mill will support the event.

According to Rawls' "Theory of Justice," it makes no difference if a person belongs to a minority group because they all have the same fundamental rights. They are entitled to the same rights, and nobody should deny them. In our scenario, if a robot detects an innocent one and this event saves others, it does not create any justice. Due to the use of robots, the amount of human work is decreasing. So it creates an unemployment problem. If a task is too difficult for a person, it creates justice from that point of view. Otherwise, it doesn't do it any justice. So for our scenario, Rawls's philosophy is not applicable.

6. Categorize each potential action:

Ethics is a term used to describe a set of moral guidelines. They have an impact on people's decisions and daily activities. The phrase "ethically obligatory" refers to the requirement of upholding moral principles and abstaining from immoral behavior. In our example, the robot checks everyone without doing anything else. Therefore, our scenario does not satisfy the class's ethical requirements. What the majority considers to be acceptable is what is "ethically accepted".

The term "ethically prohibited" also refers to an activity that is expressly forbidden under an ethics code. In our case, the majority doesn't think it's acceptable. The scenario falls into the category of "ethically prohibited" hence.

Decision Phase:

Using robots as police poses risks that can be addressed through various solutions. First, strict regulations and protocols should be implemented to safeguard privacy and data protection. This includes complying with privacy laws and providing transparent consent mechanisms for individuals to control their data. To ensure ethical use of AI in policing, comprehensive ethical frameworks must be developed. These frameworks should prioritize human rights, fairness, accountability, and non-discrimination in decision-making processes. Clear accountability and liability mechanisms are essential when AI robots are involved in decision-making. Auditing and reviewing actions can enhance transparency and mitigate potential biases or errors. Human oversight should be maintained in critical decision-making processes, allowing humans to review, challenge, or override the decisions made by AI robots to ensure fairness and justice. Thorough testing and evaluation are crucial before deploying AI systems in policing. Assessing accuracy, reliability, and performance across different scenarios can minimize the risk of unintended consequences. Continuous monitoring and improvement are necessary to build public trust and confidence. Collecting feedback from stakeholders and addressing their concerns will help identify issues and make necessary improvements.