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Article

Compensation for Damages Caused by Artificial Intelligence in Jordanian Legislation

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Abstract

Artificial intelligence technology has developed rapidly in recent times, such that the robot has become one of its most prominent manifestations, making it an intervention in multiple fields such as medicine, industry, education, etc., which raises many legal problems and obstacles, especially concerning the issue of determining the person responsible for compensating for the damages caused. It has a robot, so this study aimed to apply the rules of tort civil liability to damages caused by artificial intelligence applications in Jordanian legislation and to explain the provisions for compensation resulting from this compensation, relying on the descriptive and analytical approach. The study concluded that legal liability depends on local legislation and laws. In some cases, the owner or developer of the robot is considered responsible for any damages resulting from the use of the robot. The company that owns the robot may bear responsibility for the damages it causes, and this responsibility may include financial compensation for affected individuals. Finally, the study recommended developing clear, specific legislation regulating the obligor's liability for the damages caused by intelligent robots and setting standards and requirements for safety and security at the level of design and operation of robots to reduce the risk of damage.

Keywords: *artificial intelligence, tort, compensation.*

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Introduction

Artificial intelligence AI was first coined in late 1956 at the Dartmouth Conference. Since then, researchers and developers have filed some 340,000 AI-related patent applications, and 1.6 million AI-related articles have been published. The development and widespread usage of computers in the 1940s laid the groundwork for research on artificial intelligence. Interest in neural networks peaked in the early 1950s. In the 1960s, however, research efforts shifted towards knowledge-based systems, and this trend persisted throughout the 1970s. Since John McCarthy was regarded as one of the most eminent artificial intelligence experts and an inventor and pioneer in computer science, there was a significant surge in artificial intelligence research at the start of the 1980s.

McCarthy invited researchers from various computer science disciplines to participate in his artificial intelligence research project in 1956 because he was intrigued by the idea of fusing programming languages, robotics, and the expertise of people working with complex neural networks. Even though McCarthy's goal of utilizing programming languages to replicate the human mind mainly remained unfulfilled, artificial intelligence research and development officially began, piquing interest in the term AI among researchers, professionals, and users.

A growing number of experts have focused on artificial intelligence since 2010, primarily because of the technology's repeated daily use, which presents unique legal challenges. This includes psychologists, intelligence tests, academic scopes, and even the field of law. Artificial intelligence was first discussed within the legal framework at the beginning of the 20th century.

Artificial intelligence was defined as a part of computer science concerned with intelligent computer systems that possess characteristics associated with intelligence and decision-making and are like human behavior in terms of language, learning, thinking, and problem-solving. Nevertheless, there is no single definition of artificial intelligence, even though this discipline is not new, and both the technological and academic communities and the business world are interested in it.

Given that the science of artificial intelligence deals with the artificial mind on the one hand and the autonomous use of intelligent machines on the other, its features and characteristics overlap with those of different concepts, like automation and human intelligence. Therefore, it is crucial to elucidate what artificial intelligence means. How was it legally characterized?

Several controversial opinions arose regarding its possible drawbacks and harm, which has led scholars to consider the issue of compensation for the damage

resulting from AI's use. This paper focuses on the problem of compensating for damage caused by artificial intelligence.

Problem Statement

The problem in this study lies in the extent to which the civil liability provisions in the Civil Code are compatible with the damage caused by robots, the extent of the possibility of establishing their tort liability, and the protective measures for compensating damages caused by AI acts. Is the legislator's silence on this issue evidence of his contentment with referring to the general rules in the Jordanian civil law to determine the provisions of civil liability for robot damages and to determine the nature of the damage caused by AI and its legal consequences?

Study Objectives

Given the concerns posed by the study's problem, the objectives were to clarify the consequences of robot-caused damage, the process for bringing a civil compensation claim, the methodology for estimating such damage, and preventative measures to make up for them. It also examined Jordanian legislation's provisions regarding tort liability caused by artificial intelligence damages and the legislator's position.

Study Plan

The study was divided into an introduction and two sections: conclusion, results, and recommendations. The First section discusses the elements of civil tort liability for artificial intelligence damages. The second section delves into the compensation provisions for damage caused by artificial intelligence.

Discussion

Elements of Civil Tort Liability for Damages Caused by Artificial Intelligence

Tort liability of a robot may arise due to damage caused by the illegal use of its systems or the failure of AI systems to perform. Given the specificity of this liability, which distinguishes it from the establishment of traditional liability, it arises in cases where there is no contract and the damages were performed electronically; however, the person responsible for causing electronic damage is inevitably liable for negligence.

We will devote a special section to discussing the elements of tort liability arising from using artificial intelligence applications. Generally, the components of tort liability include wrongful acts, damage, and causation. However, what distinguishes the components of tort liability caused by artificial intelligence is the means used to

cause the damage: the internet. We will try to explain this issue in this section through the following:

Tort civil liability for artificial intelligence

Wrong acts are a fundamental basis for establishing civil liability, mainly arising from personal action. An obligor bears responsibility if he fails to perform his duty in whole or part; he delays performing it or performs it in a defective manner, leading to damage. Considering that this wrongdoing represents a deviation in behavior that leads to being held liable, the criterion for this liability is that a reasonable person in the defendant's position would not do or omit to do.

The Jordanian legislator adopted this principle, as Article (358/1) of the Civil Code stipulates that: *"If that which is required of an obligor is the preservation of a thing, or the management thereof, or the exercise of care in the performance of his obligation, he shall have discharged that obligation if, in the performance thereof, he did all such care as the reasonable man would do in his position, notwithstanding that the intended object is not achieved, unless there is an agreement or a provision of law to the contrary."* Thus, if an obligor breaches his obligation, delays performing it, or does it in a defective manner intentionally or through negligence, his responsibility arises, and he must compensate the obligee for the damage he suffered.

Regarding the tort liability of a robot, there is widespread controversy. For instance, one viewpoint contends that a personal fault is the basis for establishing tort liability for a robot akin to a person. Thus, it is responsible for compensating for the damage caused by the thing in its custody due to its fault. Proponents of this theory consider fault as a basis for responsibility for doing things, but disagree on the nature of the fault. Some attributed it to an assumed fault, while others attributed it to an established fault.

This theory emerged in the late nineteenth century to address the conditions that accompanied the development of the machinery industry and the large number of accidents that pose a liability to reduce the burden on the injured person to bear the burden of proving the custodian's fault for the object under his custody. Many theories of fault elements have emerged. Below, we will investigate the position of the Jordanian legislator on these theories:

Presumed fault as a basis for tort liability for robot custodians

This theory considers the assumed fault as a cornerstone for establishing liability for the custodian of the thing. Opponents of this theory argue that fault is the general basis for tort liability and the same as liability for things; that means the general rules require the injured person, *"plaintiff"*, to prove the defendant's fault, *"the robot's*

owner or the manufacturer", for the damage and to prove the causal relationship between the wrongdoing and the act. Still, in the scope of liability for things, it is sufficient for the plaintiff to prove that damage occurred due to the commission of the wrongdoing by the thing or the machine.

In the context of the liability related to machines, equipment, devices or robots used by a surgeon to treat wounded, patients or to provide health care services, a surgeon is supposed to be held liable for an assumed fault with no need for a patient to prove the fault of either of them, unless the act causing the damage is arose out of an extraneous cause.

Article 291 of the Jordanian Civil Code states that *"Any person who has things under his control which require special care in order to prevent their causing damage or mechanical equipment, shall be liable for any harm done by such things or equipment, save to the extent that damage could not have been averted. The above is without prejudice to any special provisions in this regard."*

In the scenario where the robot custodian fails to reduce the risks of the robot while using it, he bears negligent liability, as he is supposed to be careful to avoid all anticipated accidents during the robot's operation, or he neglects to oversee the robot while operating. If the custodian fails to reduce operational risks or takes any negative position on those risks, he will eventually bear legal responsibility. Such as, when a transport company is held accountable for managing the operation of a self-driving car, in case the vehicle runs over pedestrians despite the company knowing the wrong direction of the car and being able to find a solution or cease its proceeding by using another vehicle, but it refrains from doing so as not to damage both vehicles.

It is crucial to remember that robot owners and manufacturers must be aware of the legal ramifications of improper robot operation, which can result in severe injury. Therefore, all essential precautions must be considered to lower potential risks when utilizing robots. This theory has received considerable criticism because it grants the robot custodian the possibility of escaping liability by proving that the loss arose out of an extraneous cause in which he played no part, such as a natural disaster, unavoidable accident, force majeure, act of a third party, or act of the person suffering loss even though the fault is presumed if the machine, the robot, was under his control and damage occurred due to it. For this reason, it is no longer a legal presumption. Instead, it is based on substantive rules.

Absolute fault as a basis for tort liability for overseeing the robot

Proponents of the theory that fault can be used as an argument for wrongdoing attempted to uphold this theory and looked for a means to keep it from colliding with the rules of proof. These attempts led to the development of the Absolute Fault Theory,

a novel theory of jurisprudence. The theory states that the custodian's fault is not only presumed but also seen as an absolute fault of a particular kind, and it occurs as soon as harm is inflicted on the injured person by the act of a machine or equipment under the control of a custodian.

The lawmaker places a specific legal duty on the person in charge of an object under his absolute control by keeping an eye on it and taking the required precautions to keep it from harming others.

According to the opinion of the supporters of this theory, this obligation that the law imposes on the custodian of the thing is not only an obligation to exercise a duty of care but rather an obligation to achieve a goal, that is, to oversee the equipment under his control. If the thing escapes the custodian's control and causes harm to others, he will be deemed to have breached his obligations without the need to prove his negligence. Furthermore, the custodian cannot escape liability by denying his fault or proving that his act was consistent with the behavior of a reasonable person. Once harm is caused to others by the act of the equipment, the fault is proven on the custodian.

To sum up, personal theories based on inherent fault are insufficient to ensure and protect the injured party and to support a claim of liability against machines, including robots. As a result, a new school of law has evolved, which we shall address in the third section. This school holds that bearing consequences rather than the concept of fault is the foundation for one's liability for wrong acts.

Risk Theory reasonably

Proponents of this theory claim that the legislator has burdened the custodian with reimbursement for damage resulting from the object under his custody. Because he is the one who created the risks by using this object, and he is the one who benefits from its use. The applicable rule in this scenario is *"Charges in consideration of profits"*. Based on this theory, the indiscriminate person can also be regarded as an object's custodian because they can pose risks using dangerous things and benefit from that use.

Similarly, under this theory, the owner of the thing, the usufructuary, the tenant and borrower, and the thief, if he keeps the stolen thing for his use, are placed in the same legal position. This theory also does not consider the subordinate and the deputy as custodians because their actions benefit the principal, just as the principal is the one who uses the thing and thus is the one who creates the risks.

Regarding the position of the Jordanian legislator on this issue, the explanatory memorandum to the Jordanian Civil Law for the text of Article 291 states that, as for the machine, it cannot move unless by its owner, so the damage it causes is direct

damage, and direct damage is not required for trespassing. Since the damage caused to objects and machines is ascribed to the person who controls the object. The Jordanian legislator also opted for the rule' Charges in consideration of profits. This Article was stipulated without resorting to the theory of the presumed fault, for which both the Egyptian Civil Law and the Jordanian legislator hold liability.

We argue that this rule limits the verdict to things that need special care and mechanical things. As for others, it makes it easier for those controlling them to prevent their damage; otherwise, they would be causing it to themselves.

In the context of our study, for instance, if the robot is designed to guard a building or office, the assumed fault limits, in this case, include the maximum number of faults the robot can make in detecting intruders or unwanted people. Suppose the robot is designed to work in hazardous industrial environments, such as construction sites or mines. In that case, the assumed fault limits include the maximum number of faults the robot can make to avoid accidents or reduce damage.

Damage and Causation in Artificial Intelligence Yort

To hold the robot (AI) torturously liable for the damage, harm must be inflicted on a human, which must be a natural consequence of the robot's fault. This necessitates the availability of factors of harm and the causal relationship between them. The following section is devoted to discussing these factors:

Damage

The Jordanian Civil Law explicitly stipulates that damage is a pillar of tort liability, whether in unlawful acts against property, unlawful acts against oneself, or illegal joint acts. Based on Article 316, *"any person who has things under his control which require special care in order to prevent their causing damage or mechanical equipment shall be liable for any harm done by such things or equipment…"* To consider the robot's owner, the custodian, tortiously liable, the machine act must cause damage. This fact necessitates distinguishing between liability based on performing a duty and responsibility based merely on custodianship. In the former situation, the guard's liability is determined by how well he protects this object. The Jordanian lawmaker restricted liability to hazardous objects, like mechanical machinery, rather than extending it to other things or equipment.

Liability can only arise when there is genuine evidence of a causal relationship between the thing and the damage it causes, and when the damage results from the object's actions. Consequently, if a patient walks into a surgeon's clinic, slips and falls, landing on a surgical knife or the hand of a surgical robot with sharp edges, and sustains injuries because of this, it is impossible to define the surgeon's duty as being

the owner of the surgical robot or instruments. While it is true that these instruments and equipment harmed the patient, their interference in that harm was entirely harmful (omission).

From the above, it is evident that an object must have a positive effect (commission of an act) on the damage for its custodian to be held liable. The object must also have been present at the time and location where the damage occurred; otherwise, the custodian's liability would not have been established. It is crucial to ascertain which interference positively affects, causing harm, and which is negative.

Causality

The Jordanian lawmaker established the liability of the custodian of mechanical equipment based on the rule of *"Charges in consideration of profits"*. Nevertheless, he contradicted what prevailed in this regard in France and the Arab countries from which it was adopted. He established this liability on a presumed transgression that can be proven contrary. This means that the robot's owner has the right to prove that he has exercised the necessary care to prevent harm to others. If he succeeds, he escapes all liability for the damage incurred. The position of the Jordanian legislator is consistent with what is established in Islamic jurisprudence, which is: *"There is no obligation except by the capability."* We argue that when the Jordanian legislator dealt with liability for hazardous machines and objects, he established liability on those who have actual control over the thing.

The Jordanian legislator has granted the custodian of the robot legal means to escape responsibility under the general rules represented by refuting the causal relationship between the robot's action and the damage. Despite the damage, it permitted him to prove that he had taken special care to prevent them from causing damage. It also provided several reasons to escape this liability, such as proving that the loss arose from an extraneous cause and that the intervention was negative in causing the damage. Thus, a causal relationship does not exist. In the same context, the surgeon's responsibility (custodian) does not arise in the sense that there must be positive intervention by the object (the robot) to cause the damage, which is the presence of the causal link between the damage and the act. However, harmful intervention is insufficient for responsibility to arise, so the damage does not result from the robot's action, and thus, the custodian's liability is nullified.

Finally, the damage must result from a fault to establish tort liability arising from the robot custodians' duty. However, if the damage results from an extraneous cause beyond the control of the custodian, then the causal relationship is deemed absent. There is also no causal relationship in the case where the fault is the cause of the damage, but it is a non-productive cause or a productive but indirect cause.

Compensation Provisions for Harm Caused by Artificial Intelligence

Liability is typically imposed on whoever violates a contract or a law. Every person is responsible for their actions. This principle also applies to cases where Robert causes the damage. In this chapter, we will discuss the compensation in terms of the criteria for estimating damages resulting from the acts of robots per the provisions of Jordanian legislation.

Section One

Legally, compensation serves as a legal instrument to repair the damage that befell the obligation, regardless of the source of the obligation that the obligor breached and regardless of the nature of the liability, whether tortious or contractual. Nevertheless, this view of compensation is no longer the case, as some jurists contend that the legal system should not equate the goals of two different legal systems. When an injured person files a claim under the tort provisions, his goal is to reconcile the damage he has suffered and restore the situation to what it was before the damage occurred. This contrasts with contract violation cases where the obligee seeks compensation and benefits for the damage resulting from the obligator's breach of the contract.

Concerning artificial intelligence, the injured party can claim compensation if the elements of civil liability for the owner of the Robert are met, which are the damage and causal relationship. This occurs due to a breach of one of the obligations imposed, such as ensuring safety. Jordanian and Egyptian legislation adopted the idea of protecting those injured by making good for their losses resulting from using dangerous machines and objects under civil liability that requires compensation for the damages. They authorized the court to assess and determine the fair compensation.

The Jordanian Civil Law in Article 269 specifies that the compensation can be made payable in instalments or by regular income, and in those events, the obligor may be ordered to provide a guarantee assessed by the judge or acceptable security. The compensation shall be assessed in money, but provided that the judge may, according to the circumstances and upon the victim's application, order that the plaintiff be restored to his former position. He may also request that a specific act connected with the harmful act be performed by doing good.

Compensation In-kind:

It can be said that compensation in kind for artificial intelligence damage applies within the scope of physical and moral harm. In physical damage, the loss can be repaired by restitution of the thing injured, which is the primary goal of a compensation claim. In contrast, moral damage, which typically refers to emotional or

psychological harm, is more challenging to quantify than the harm a victim suffered. It should be noted that the court has the power to determine the compensation in kind based on the circumstances and upon the injured person's request.

In-kind compensation for artificial intelligence damage is done by returning the damaged item to how it was before the damage occurred. As for physical damages, compensation is provided for the loss, as it may return the injured person to the state he was in before the damage occurred. Since most of the damage resulting from artificial intelligence is physical and moral, it is necessary to compensate the injured person, which is better than leaving the damage as it is and giving the injured person monetary compensation. In this regard, we remember what the scholar Al-Sanhouri said: *"Nothing remains of the violation or illegal act except the memory."*

Monetary Compensation:

Commonly, compensation can be made in money, such that the judge orders the tortfeasor to compensate for the damage he inflicted on the victim. This method typically provides a remedy for the damage caused by reimbursing the injured person for the loss they suffered, whether physical or moral. Furthermore, it allows the injured party to determine what to do with the amount of compensation; thus, he may not request to repair the damage or restore the situation to what it was before the damage occurred. Article (269/2) of the Jordanian Civil Law states that monetary compensation is the applicable rule for a harmful act.

Consequently, the Jordanian Court of Cassation ruled in its decision No. (5232/2021) that: *"It is understood from Article (269) of the law that if restitution of the thing injured is not possible, compensation can be requested"*. According to the general rule, monetary compensation is the solution. However, it can be in different forms, such as a total amount or revenue for a specific period or a lifetime, all of which is according to what the trial court finds regarding the circumstances of the case. Accordingly, the court's ruling is for the plaintiff to pay a specific amount to cover the damage he suffered without violating the law.

Regarding the assessment of compensation, Article (362) of the Jordanian Civil Law stipulates that: *"The compensation shall be assessed in money, but provided that the judge may, according to the circumstances and upon the application of the victim, order that the plaintiff be restored to his former position, and he may also order that a specific act connected with the harmful act be performed by way of making good."* Article 363 also specifies: *"If the amount of compensation is not fixed by law or by the contract, the court shall assess it in an amount equivalent to the damage suffered at the time of the occurrence thereof."*

In one of its rulings, the Jordanian Court of Cassation affirmed that the car's value decline is calculated as the difference between its pre- and post-destruction

values, with repair costs included in the value drop. If the car's partial destruction has significantly decreased its worth as defined by Article 900 of the Code of Judicial Provisions, the terms of which do not contradict those of Jordanian Civil Law. The owner of the money (injured) can give it to the one who caused its destruction and claim the entire worth of the destroyed item, or he can take the value of what is of his losses.

Based on the provisions of Articles (256, 266, 920, 29) of the Jordanian Civil Code and Article (3, 13) of Insurance Law No. (12 of 2010), The insurance company guarantees compensation for the decrease in the vehicle's value. Thus, compensation to the injured person following these articles is relied upon in all judgment decisions related to claims for compensation for damage and a decrease in the damaged vehicle's value.

Back-up means to redress artificial intelligence liability

There are alternative methods of compensation that can be resorted to in cases of damage resulting from the actions of AI, which is known as a backup means of compensation.

Insurance

A question arises: who is interested in claiming insurance coverage when it is unknown who bears responsibility among the parties in artificial intelligence? Is it a robot or a custodian? This will force insurance companies to either refuse to insure specific automated robot models or charge exorbitant premiums, delaying the adoption of robots and necessitating the creation of a new insurance market to handle risky and sophisticated industries that involve both physical and psychological risks. For instance, we can cite the motor vehicle law that the United Kingdom passed in 2018. This law establishes the insurer's liability for damage resulting, in whole or in part, from an insured motor vehicle at the time of the accident, regardless of responsibility on the part of any individual (driver, company, manufacturer).

Given the state of technology today, specific legislation must be passed to make up for the harm done. Owing to artificial intelligence (AI), it is exceedingly challenging to compensate for damages caused by intelligent programs in every situation, and large industrial companies use this to shield themselves from liability for harm done to their products by insisting that the intelligent robots they produce be given an industrial character.

The insurance policy for artificial intelligence machines provides financial protection for material damages and physical injuries resulting from any accident related to those machines and compensation for any person injured by the intelligent

robot, including moral damage, in addition to damage to the intelligent machine if a machine or electronic system caused it. Therefore, the European Union proposed providing fault insurance as a general solution for all types of robots. This insurance arose in the United States of America in 1960 due to severe accidents; the resulting legal claims led to exhausting the judicial system.

In 2018, the United Kingdom also passed a non-fault insurance system for motor vehicles, the Motor and Electric Vehicles Act 2018, under which the insurer is liable for damage when it results wholly or partly from an insured motor vehicle at the accident, without prejudice to any person's liability (Driver, manufacturer, etc).

Compensation funds

In such a case, consideration is directed to the Compensation Fund for those affected by vehicle accidents, which is present in Jordanian law, and its application to artificial intelligence applications, as stated in the Instructions of the Compensation Fund for those affected by vehicle accidents No. (6) of 2004, to create a special fund to compensate those affected in two cases; the first is the absence of an insurance policy for the vehicle causing the accident that covers civil liability resulting from the use of the vehicle. The second case is the failure to verify the vehicle's identity, which causes damage or the inability to know the owner or driver of that vehicle.

Establishing compensation funds serves a different goal than providing the necessary monies to compensate for the harm caused by the question of artificial intelligence. The Compensation Fund for Terrorism Victims and War-Affected People, for instance, was set up for humanitarian and political reasons about public law; it bears the financial burden of subsidizing these funds, as no particular entity is thought to have committed the error of culpability. The government or benefactors often support it, though occasionally, the beneficiaries collect it on their own without suffering any damage.

The European Parliament's decision on February 16, 2017, regarding compensation funds as a back-up means of guaranteeing the possibility of compensation for damages in all cases that arise, states that the nature of civil liability for damages to intelligent machines does not fit within the framework of private law because it is an original means of compensation. It is not covered by insurance.

This should only be used as a last resort to make up for artificial intelligence-related damage, and it should only be applied to those who possess AI devices and lack insurance coverage or in the event of an insurance dispute. This is because traditional civil responsibility laws rely on the existence of an official in charge of paying damages, which is inappropriate when it is hard to identify the accountable

party. Thus, in contrast to individual responsibility, which forms the foundation of traditional civil liability laws, what is known as societal responsibility emerged.

Conclusion

The technological area has undergone a metamorphosis that is beyond human comprehension. With the introduction of sophisticated artificial intelligence systems, many fields now utilize these applications. Both personally and professionally, the risks, hazards, and dangers that people using these intelligent applications are exposed to have increased. Additionally, in various commercial, industrial, medical, and military domains, they play diverse roles as suppliers, manufacturers, or users of those applications. As a result, the study came to the following results and suggestions:

Results

1. Legal liability is based on national and international rules and regulations; in some situations, the robot's creator or owner is held accountable for any harm brought about by the robot's use.
2. When developing and programming robots, robot owners and developers must consider ethics. They also need to provide safe, ethically governed technology.
3. The liability arising from deploying intelligent robots is contingent upon several variables, including legislation, morality, application, and context-specific training, oversight, and transparency.
4. When accidents or damages occur, sophisticated monitoring and analytic methods can help establish liability and guide legal action.
5. Due to design flaws or inaccurate movement, robots may cause material damage. They may also have psychological and social effects, such as altering how people interact with technology and raising concerns about joblessness. As a result, it is necessary to determine who is responsible for the damage done and how to get compensation.

Recommendations

1. Create precise and lucid regulations governing the civil liability for harm caused by intelligent robots.
2. Prevent misunderstandings and define artificial intelligence and robots precisely in the legislation.
3. The business that owns the robot shall hold liability for the harm it produces, and this liability may include paying injured parties monetary damages. In this sense, we hope lawmakers will pass laws mandating that owners of robots obtain insurance to cover potential losses.
4. Decrease the risk of damage and set safety and security guidelines and specifications for the construction and use of robots.

5. Oversee impartial assessments of artificial intelligence systems to ensure compliance with security and safety regulations.
6. Providing operators and users with the required training to guarantee the safe and efficient usage of robots. Systems for supervision and monitoring must be in place to monitor robot performance and lower safety risks.
7. Create a suitable method that requires robot developers and owners to notify users clearly and understandably about their machines' capabilities, restrictions, and do-and-don'ts.

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