

The Use Of Artificial Intelligence In The Criminal Justice System (A Comparative Study)

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Abstract

The study aimed to define what artificial intelligence is, and its basic components, and to show how to use artificial intelligence in achieving the criminal justice. Then uncovering the various mechanisms that ensure compatibility between artificial intelligence and the human rights, as well as searching for areas available for artificial intelligence to excel in combating (fighting) the crime and achieving the criminal justice. In the research, the researcher used several research methods, namely, the descriptive approach, the analytical approach, and the comparative approach, due to the study's need for all of them. The researcher reached a number of results, a number of recommendations. As for the results, the most important of them were that artificial intelligence can practically carry out the functions of the police from monitoring and maintaining order, predicting crime and working to prevent it. It is also considered a good tool in the hands of the judicial officer, if it is used well in order to enforce justice, and there are great powers in the investigation management and knowledge of the conditions of the accused from his features and emotions. And that the UAE federal law does not yet have texts that give legitimacy to artificial intelligence in working in the field of justice enforcement, investigations and sentencing judgments. As for the recommendations, the most important of which were the need for the United Arab Emirates to pay attention to artificial intelligence, machine learning and expert systems from a technological point of view. And the attempt to encourage companies (and then individuals) to rely in their work on artificial intelligence, due to the characteristics of accuracy and speed. The researcher also recommended the necessity of reviewing the complete criminal legislative framework, and developing texts that ensure the use of artificial intelligence, as a good support system at all stages of justice enforcement.

Keywords: Artificial intelligence, criminal justice.

1. Introduction

The past decades of the last century have witnessed a dramatic acceleration and development in the pace of change towards economics and knowledge growth. Because knowledge is one of the dynamic fundamentals through which economic growth can be driven in the world different countries, and the recognition of knowledge as an intrinsic and intangible existence has undoubtedly posed a number of challenges and sometimes obstacles to knowledge management. This has prompted some to rearrange their priorities. The knowledge development of all the world's countries has resulted in the development

of many useful technological applications. The most important of which have been the applications of artificial intelligence, and have resulted in a range of potential and enormous flows of information to organizations (Jamil, Ahmed Adel Othman, and Osman Hussein, 2012). Therefore, the use of computers in the field of recognition of shapes, symbols and various models of the emergence of artificial intelligence systems, which have been characterized by the transfer of part of the human intelligence methods of computer programming systems. And in turn, also contributed to the building of systems of expertise that included some of man's experience (Bilal, Ahmed Habib and Musa Abdullah, 2019, *Artificial Intelligence*, Kitab Foundation for Publishing and Distribution, Cairo, 2019, p. 38.).

This study came to address the provisions related to the use of artificial intelligence in criminal justice. The importance of the study of "The Use of Artificial Intelligence in Criminal Justice" is shown in the accuracy of its subject, its importance and its modernity in relation to the known sciences, and the presence of an information-technological part, along with the legal part, because it attempts to explore the extent to which artificial intelligence systems can contribute and assist in order to attain criminal justice. This is represented in its use in the field of crime control and investigation of the accused persons. Among the scenes in this time is the increasing importance of artificial intelligence, its growing ability to solve problems, and activating logical thinking, which leads to right logical results, based on the information bases stored within it. Smart systems have been used in many scientific, medical, military and legal fields, which made the researcher dedicate this study to deepening and scrutinizing the study on how to use the artificial intelligence system in legal terms to benefit from its ability to analyze and audit, to reach criminal justice. This study came to ask a major question: Is there a practical possibility to use artificial intelligence in criminal justice? Some sub-questions are branched from the main question, which are, what is artificial intelligence? And what are its components? How can artificial intelligence be used to achieve the criminal justice? What are the different possible mechanisms to harmonize the artificial intelligence (AI) with human rights? What are the areas of use of artificial intelligence in the field of the criminal justice?

We stress that the ways to combat (fighting) crimes in modern societies raise many problems, and these problems appear as a result of the development of technological sciences in the whole world, which led to the emergence of crimes that were not known before. In addition to the emergence of renewed and transformed methods that were not known by the traditional means of control, and were not circulated in front of the investigative staff in the previous eras, as the virtual society resulting from instant communication via the Internet, and the great entanglement contributed by the electronic payment systems via the Internet. The spread of E-wallets and E-marketing, all of this and others led to a problem in the necessity of developing the justice personnel in their methods in terms of crime control and investigation. And even in the way of governance, and this faced many problems. In particular, the legal regulations that give legitimacy to the adoption of new electronic means to work in the field of crime control and investigation of the accused person.

2. literature review

The study, entitled "The Legal Nature and Legality of AI Crime Prediction" (Al-Sharif, Mahmoud Salama Abdel Moneim, 2021), and the researcher spoke about combating crime through AI algorithms, spoke

about the legal nature of AI prediction, and noted that it is a security measure that falls within the duties of the judicial control officers and exposes the technical components needed for artificial intelligence (AI) applications. The author provided a masterful analysis of the legal nature of crime prediction and indicated that artificial intelligence algorithms were a security measure to be implemented. The study specialized in predicting crime and did not examine how AI was used to control crime, or in investigating the accused after his arrest. The researcher will focus on how artificial intelligence systems can be used to achieve the criminal justice at the advanced stages after the author's interrupted stage of crime prediction. The study is entitled: "Employing predictive justice algorithms in the criminal justice system: prospects and challenges" (Mosbeh, Dr. Omar Abdul Majeed, 2020). In this study, the author spoke about the use of artificial intelligence algorithms in achieving predictive justice in the criminal justice system, and the author spoke about what artificial intelligence algorithms are. What is its importance in achieving criminal justice, its use in the pre-trial stage, and its use also in the trial stage? I have benefited from this study how to improve the role of algorithms in achieving predictive justice in crime prevention and detection of the crime also, and the author spoke about the pre-trial and post-trial phases. The author did not address the various mechanisms that can be used to achieve the criminal justice. Emphasis will be placed on the subject of the study .In addition to some other topics that the researcher will talk about, such as diversifying the areas that can benefit from artificial intelligence in combating and controlling crime.

3. Research Methodology

The researcher will use the following scientific research methods. In order to identify and describe what artificial intelligence is, and how it is used in order to achieve criminal justice. This is done through the descriptive and inductive approach, demonstrating the current situation of artificial intelligence, and how to advance it, and maximize its use, by increasing the effectiveness of its use in control, inquires and investigations according to excellent and superior programs and information bases. And with the use of the technological advances necessary for this, and the automation of procedures aimed at achieving criminal justice, to obtain a higher degree of criminal justice inclusion of automated procedures based on artificial intelligence. In order to assist the researcher in measuring the degree of compatibility of the use of artificial intelligence in achieving criminal justice, in terms of its compatibility with human rights, as well as in terms of its Compatibility with legitimate texts that cast shadows of legitimacy on it. The comparative approach may be used in the case of some legal systems that use artificial intelligence to help achieve criminal justice.

This study will be divided according to the following methodology:

The first section: What is artificial intelligence?

The first demand: the concept and nature of artificial intelligence.

The second demand: the use of artificial intelligence in law enforcement.

The second section: the use of artificial intelligence in the work of evidence and investigation.

The first demand: the legal basis for predicting and preventing crime.

The second demand: the problem of using artificial intelligence in the work of inference.

The third demand: the characteristics of the criminal investigator and the extent of their agreement with artificial intelligence.

The fourth demand: the legality of artificial intelligence solutions in investigation work.

The third section: The future of artificial intelligence in law enforcement and criminal justice.

The first demand: assessing the use of artificial intelligence in achieving criminal justice.

The second demand: the applications of artificial intelligence in the field of criminal justice.

Conclusion.

Resources and references.

Based on the foregoing, the elements of the topic are studied as follows:

2. The first section c: What is artificial intelligence?

No one doubts that the world is on the threshold, but rather it has entered a completely different historical stage from the previous one. And this revolution will change, if not already, much of the form of human life led by artificial intelligence. It is a general and comprehensive revolution at various levels of security, economic, social and others. Perhaps this is due to the fact that the applications of artificial intelligence are numerous and increasing in a way that is difficult to enumerate, as it is involved in almost all human fields. Until this moment, a general and objective evaluation of the repercussions of these applications has not been developed, especially with the state of division between these applications that are between civilian and military, and the repercussions differ in each of them as well. It is even possible to say that some civilian applications of artificial intelligence, which are supposed to make the lives of individuals easier and faster, can be employed in spying on them as well as tracking them (Abdel-Wahab, Shadi, and Al-Ghitani, Ibrahim, Yahya, and Sarah, 2018). Because of the importance of the concept in this section, we discuss the concept of artificial intelligence and its nature in the first demand, then the use of artificial intelligence in law enforcement in the second demand.

1.2 The first demand: the concept of artificial intelligence and its characteristics

2.1.1 Linguistic Definition

That which is intelligent and intelligence and that person is intelligent: whoever is quick to understand and is kindled by intuition, the smartest is sharp and acute in his intelligence. And that is his ability to analyze, synthesize, distinguish, select and adapt to different situations. Artificial intelligence It is the ability of a tool or some device to perform some activities that need intelligence, such as actual reasoning (deduction) and self-correction (Omar, Dr. Ahmed Mukhtar, 2008). It is intelligence that machines and programs display in a way that simulates human mental abilities and patterns of work, such as the ability to learn, infer and respond to situations in which the machine is not programmed. It is also the name of an academic field concerned with how to make computers and programs capable of intelligent behavior.

(Jamil and Osman2012), it is also known as: "The science that is concerned with the manufacture of intelligent machines that perform actions that a person considers smart actions according to a set of many flowing databases and algorithms. So that it is ready, present and available for the machine to use with an intelligence that simulates human intelligence, to benefit from it in one of the many fields in which the intelligent machine excels. John McCarthy defines it in a simple expressive sentence. John McCarthy is the first to put the term artificial intelligence in 1955 AD as: "The science and engineering of making intelligent machines (Al-Zahiri, Dr. Saeed Khalfan Al Dhaheri, 2013). Marvin Lee Minsky defined it as building computer programs that engage in tasks that are satisfactorily accomplished by humans. (Musa and Bilal, Dr. Abdullah Musa, Dr. Ahmed Habib Bilal, 2019). Artificial intelligence can be defined as: "a rapidly growing field in computer science, as the father of artificial intelligence ("John McCarthy"), defined it as" the science and engineering of making machines. Conceptually, artificial intelligence is the ability of a machine to independently perceive and respond to its environment and to perform tasks that normally require human intelligence and decision-making processes without direct human intervention (Rigano, C, 2019). It is also defined as a science and a set of techniques and arithmetic equations that simulate the method of human nervous and physical systems, in feeling, learning and behaving (Fayek Awadin Mohamed, 2000).

2.2 The second requirement: the use of artificial intelligence in law enforcement

It is possible to use artificial intelligence in the processes of investigation, research and interrogation with the accused, in order to reveal the extent to which he committed the crime or that he is innocent of it. By generating a number of questions on the subject of the crime related to the accused, including traditional routine questions such as the name, age, address of the accused and other data related to the personality of the accused. Accused. Then generate some questions about the subject of the crime and the circumstances of its occurrence, and the extent of the accused's relationship to the execution of the crime. And the evidence for that, from the presence of tools used in the execution of the crime, or the presence of witnesses to prove that the accused committed the crime.

2.2.1 Using artificial intelligence to identify criminals' photos

As for the skill of artificial intelligence in recognizing images, shapes or different sounds, and the extent of their conformity with databases and expert systems, to know the owner of the image or the owner of the sound, according to the registrant in his various databases. The researcher believes that this skill is very suitable for the robot to carry out procedures in the field of crime prevention, and the field of arresting the criminal during the commission of the crime, or searching for suspects in a particular crime for investigation. And to know the extent of any of theme's contribution to committing the crime.

2.2.2The use of artificial intelligence in crime prevention:

In this research, an important legal question is raised, which is. Is it possible, programmatically and scientifically, to use artificial intelligence to participate in the achievement of criminal justice, including the procedures before the occurrence of the crime. By working to activate the means to achieve the prevention of the occurrence of crimes. It is worth noting that with the help of artificial intelligence, it is possible to know a lot of information about crimes, their situation and legal adaptation, and to

determine priorities and social information, which is used to recommend the issuance of certain sentences, identify the perpetrators of the crimes committed. It can also detect people who are at risk of algorithms and huge databases within artificial intelligence.

2.2.3 Using artificial intelligence to apprehend the perpetrator

After the crime has occurred, can artificial intelligence be used to identify the culprit or perpetrators, and can artificial intelligence chase, catch up, and catch the criminal. In fact, all of these assumptions have become important to be exposed and explored from a legal point of view, to show the extent to which artificial intelligence contributes to detecting crimes if the crime was committed in front of the robot (the guard), who saw it and was able to follow the perpetrator and catch up with him or if he was not present at the time of its commission, will artificial intelligence be able to analyze the relevant data, discover the perpetrator of the crime from the databases and manage the knowledge that is registered with him programmatically. Can a smart machine track a crime and know the offender on its own? If artificial intelligence has been technically invented, it will be able to perform the aforementioned tasks of making preventive measures to prevent the occurrence of the crime, or discovering the crime after it has occurred and tracking and arresting the offender. Likewise, artificial intelligence can Shot Pattern Detection provides AI algorithm analysis of shotgun audio files based on observation of gunshot content and quality using well-defined mathematical models, in which algorithms are developed to detect gunshots, estimating probabilities of grade and caliber. All of this leads to assistance in law enforcement when investigating the accused in the circumstances of the crime (Rigano, C, 2019).

2.2.4 Use Artificial intelligence in criminal identification

Artificial intelligence can also benefit the law enforcement community by emphasizing a scientific point of view and evidence, and this shows clearly and especially in the forensic DNA test (DNA analysis), This has an unprecedented impact on the detection of criminals, and in the past few decades' judicial systems have benefited from analyses of biological substances such as blood, saliva, semen, and skin cells, which can be spread by contact during the commission of various crimes as DNA analysis (Rigano, C, 2019). Technology advances using artificial intelligence, this has allowed forensic scientists to detect crimes and provide evidence from analysis. DNA, especially in sexual assault crimes, and murders can now be submitted to the laboratory to perform the necessary acid analyzes, so that the perpetrators can be detected by analyzing the nucleic acids, and the applications of artificial intelligence in this field (Rigano, C, 2019).

2.2.5 Using Artificial Neural Networks to Predict Criminal Severity:

Artificial neural networks can allow employees to predict criminal risk by unknown criminals who have found a way to avoid alert triggers in rule-based binary security systems (Abdel-Zaher, Dr. Ahmed, 2020). These artificial neural networks connect millions of data points from seemingly unrelated databases that contain everything from social media posts to IP addresses used on Wi-Fi networks. And other data that is linked programmatically through the knowledge bases of artificial intelligence and the

formation of subjective opinions that make it able to make the appropriate decision, and determine the patterns to be used.

3. The second topic: the use of artificial intelligence in the work of inference and investigation.

The work of inference and investigation are the actions that are taken towards crime, to work on its prevention as a main and basic goal. If the crime was committed without being able to prevent it or prevent it, for any reason, work will be done to deduce the perpetrators and the circumstances in which the crime was committed. And research using algorithms to identify the culprit or perpetrators who committed the crime, providing sufficient evidence that they committed the crime. Accordingly, the speech in this section will be divided into three demands as follows.

3.1 The first demand: the legal basis for predicting and preventing crime

3.1.1 Meaning of Crime Prediction

The term predicting the crime means any study of the circumstances and circumstances of the situation in order to anticipate its occurrence in the future (Sharif, Mahmoud Salama Abdel Moneim, 2019), with the aim of preventing it from happening. The beginning was in a fictional story by the American novelist "Philip K. Dick" such as the novel *The Minority Report* published in 1956 AD in the magazine *Fantastic Universe*, where it tells it is about three people who have the ability to predict crimes before they happen, and it is called *Precrime police* (Sharif, Mahmoud Salama Abdel Moneim, 2019). Predicting a crime is defined as, "the process of finding out about the future behavior that involves a criminal risk for some individuals (Al-Alfi, Ramadan al-Sayyid, 1998).

3.1.2 Importance of Algorithms in Crime Prediction

An algorithm is a set of logically arranged procedures that are implemented to reach a specific goal or desired outcome (Recueil Dalloz, 23 Avril 2020). Algorithms are necessary to identify crimes. It is not possible to predict crime without algorithms, and the prediction of crime by artificial intelligence is described as algorithmic prediction, and algorithms are the core and strength of artificial intelligence. One of its most important pillars, which means programming a set of sequential mathematical paths and steps necessary to solve a problem, and which is prepared software in order to give a specific result based on data and inputs fed to it. (Musa and Bilal, 2018). The word algorithm is derived from the Persian mathematician Mohamed bin Musa Al-Khwarizmi, and it is called in Latin *Algorithm*, meaning: the exact sequence of specific steps required to reach a certain thing, and can be used for sorting, classification, analysis, and prediction (Sharif, Mahmoud Salama Abdel Moneim 2007).

3.1.3. Legal Nature of Al-Khwarizmi's Crime Prediction

In order to understand the legal nature of the so-called "algorithmic prediction of crime", this requires addressing several types of natural procedures that are taken to reach a precaution against committing

and committing crimes through the algorithmic prediction of the crime. The imposition of punishment on the criminal was the only way to achieve the criminal's restraint and general restraint for all individuals so that crimes would not be committed. Thus, we were faced with precautionary measures to prevent the commission of crimes, which is the primary goal of achieving general restraint. But this did not prevent the crime from continuing to occur and perpetrated, whether by the criminal or by other criminals, and working to rehabilitate and reform criminals has become the reformist goal of the criminal. So that he is transformed into a good person, and reintegrated into society again in order to be a productive and useful person for society, and this is based on this to study the personality of the criminal according to the positivist school. To put in place a set of measures to be taken as a set of precautionary measures, aimed at reducing the danger of criminals, and limiting their criminal acts (Bahnam, Ramses, 1986).

3.1.4 Police Monitoring Using Artificial Intelligence

Police surveillance is a precautionary measure that is taken after a person commits a specific crime and implements the punishment. The monitoring stage comes in accordance with the provisions of the UAE Penal Code. Hence, artificial intelligence applications can be used to monitor those under surveillance in accordance with this provision, with the aim of verifying the conditions for implementing the surveillance, because violating the terms of the surveillance is in itself a crime punishable by imprisonment for a period not exceeding one year and a fine not exceeding five thousand dirhams, or one of these two penalties. Hence, the benefit of using artificial intelligence to monitor the convict after the execution of the sentence, to ensure the implementation of the conditions of control and to verify the behavior of the convict, to prevent him from committing the crime again, and the ability of artificial intelligence to monitor the convicts is much greater than traditional police surveillance. The occurrence of crime is predicted by artificial intelligence in the face of those under police surveillance, as we have explained, and it is obvious that the use of artificial intelligence will not be directed to predicting crime in the face of those under surveillance. Rather, the work of artificial intelligence and its ability will not be limited to those who have a criminal precedent, but it will be directed to everyone, so that one of its tasks and original goals is the complete prevention of crimes. Artificial intelligence can be used as a mediator between the accused and the victim to reconcile their requests, and within the framework of the law, the mediator is a person who undertakes the task of reconciling the two interests (Al-Feki, Dr. Imad Al-Fiqi, 2013).

3.1.5 Researcher's opinion

In the opinion of the researcher; That the works of artificial intelligence that are based on confidential personal information saved, are considered to be within the determinants of the physical actions of the crime punishable in Article (6) as well as in Article (13) of the said Federal Decree. Therefore, when using artificial intelligence in criminal justice enforcement, it must be far from attacking personal data and information. So that the system itself, by virtue of being a system that aims to enforce criminal justice, does not use, in order to achieve its goals, a means that considers itself a material act, representing a material pillar of another crime stipulated by criminalization and punishment in the law. So that all the

procedures used with artificial intelligence; or through it free of legal violations. In order for it to be a system of justice and its enforcement, without legal obstacles or causes that may fall under the law, with the use of artificial intelligence systems in the field of justice enforcement. And the control of criminals to predict crime to be in public places, with the need to announce the existence of artificial intelligence devices with the aim of enforcing justice and crime prevention.

3.2 The second requirement: the problem of using artificial intelligence in the work of inference

Artificial intelligence is used, it is necessary to ensure respect for fundamental human rights on the one hand and to ensure the security and integrity of data relevant to the achievement of criminal justice on the other hand, and to subject it to effective judicial oversight. Taking consideration the resulting risks when applied, including its impact on the rights of defense of the accused and ensuring the achievement of the rule of law. As well as making the necessary legislative amendments to criminalize violations resulting from the implementation of legal procedures traced to criminals under smart systems, which are closely related to applications of artificial intelligence. With these new developments placed in a legal and legitimate framework, so that the use of this technology does not prejudice human rights, or prejudice international and Islamic standards in respect of human rights, even if he is in the center of a legal criminal accusation. The general principle is that the accused is innocent until proven guilty of the crime in which he is accused, and then any legal issues that may be raised by the use of artificial intelligence in the enforcement of criminal (Sadat, Dr. Muhammad Muhammad, 2021) . And justice must be addressed, and among the problems of artificial intelligence in the field of internal security is the deployment by governments of smart tools and machines to monitor civilians (Oshoba and Welser IV, Oshunde Oshoba, and William Welser IV, 2017).

3.2.1 Artificial intelligence methods in preventing and detecting crime and their compatibility with judicial control procedures

In research published in Harvard Business Review that focuses on the ways companies use AI technologies to prevent or detect crime, and how this technology is used by law enforcement (Abdel-Zaher, Dr. Ahmed, 2020). The study raises some of the risks of using AI, and emphasizes determining the extent to which AI solutions contribute to fighting crime and it is a good strategic approach for companies that depends on whether the expected benefits outweigh the associated risks. Methods of Combating (fighting) and Mitigating Crime: The State mitigates crime in two ways :(the state works to reduce crime in two ways). Administrative control method is a term that refers to the measures designed to prevent crimes before they occur, i.e. to prevent their occurrence, and therefore its function depends on taking preventive measures to prevent the commission of crimes. So that its activity precedes the commission of crimes, and contributes significantly to preventing the occurrence of crimes or at least reducing their occurrence. Judicial seizure method is the method used to detect and expose the crimes that have occurred by knowing the perpetrators and how to commit the seized crime, tracking down the perpetrators. And preparing to bring them to justice after a sound legal investigation that respects the rights of the accused and respects their freedoms, and restricts them only to the extent necessary for the

conduct and interest of the investigations. Accordingly, judicial control assumes the occurrence of the crime, so information is collected and the necessary investigations are carried out. And conclusions about it that are supported with irrefutable evidence that enables the accused to be brought to trial after criminal attribution in confronting him, and thus its activities are carried out at a later stage after the occurrence of the crime.

3.2.2 Artificial intelligence and the recipe for judicial control:

The predictive function of artificial intelligence applications is included in the work of judicial officers, as Article (30) of the UAE Code of Criminal Procedure states: “Judicial officers investigate crimes, search for their perpetrators, and gather information and evidence necessary for investigation and accusation, according to Article (31) of the same law, they are subject to the Public Prosecutor and work under his supervision. By examining the text of Article (33) of the said law, as amended by Article (1) of Federal Law No. 29 of 2005 dated November 30, 2005, a statement was made of the judicial officers, and specifically mentioned them, and they are, Members of the Public Prosecution Office. Police officers describe their officers and personnel. Officers and non-commissioned officers and personnel of the Border and Coast Guard. Passport officers. Officers of sea and air ports from the police or armed forces. Officers and non-commissioned officers of civil defense. Municipal inspectors. Inspectors of the Ministry of Labor and Social Affairs. Health Ministry inspectors. Employees authorized to act as judicial officers in accordance with applicable laws and resolutions Article (33) of the UAE Code of Criminal Procedure, promulgated by Law No. (35) Of 1992,).

3.2.3. Granting the status of judicial control to artificial intelligence:

According to what was stipulated in Article (33) in which the persons who have the status of judicial arrest are mentioned exclusively. The researcher finds that it is not possible to include artificial intelligence as an officer who has the capacity of judicial control automatically within it. Because the text of Article (33) does not help in that, but the researcher believes that it is possible to rely on the text of Article (34). Article (34) of the UAE Criminal Procedures Law states: “It is permissible, by a decision of the Minister of Justice, in agreement with the competent minister or the competent authority) of the law, where it permitted to give the status of judicial control from the minister, and by the researcher’s implementation and application of the text of this article. In the context of encouraging the use of artificial intelligence in the field of criminal justice, the researcher proposes to give judicial control to artificial intelligence in the field of justice enforcement under the availability of certain conditions, namely. The Minister of the Interior has submitted a request for judicial control status for a specific artificial intelligence. That artificial intelligence succeeds in multiple and varied tests (in the field of crime prediction, the field of criminal control, and the observance of human rights). The request should be specific to the artificial intelligence person (who is required to be given the status of judicial control), and in his spatial and qualitative jurisdiction. A decision was issued with the approval of the Minister of Justice to give artificial intelligence to the status of judicial control.

3.2.4 Judicial control of crimes against rumors and cybercrime

On the other hand it is very appropriate; rather, it is useful to use artificial intelligence as a judicial control officer, in enforcing the provisions of Law (34) of 2021 on combating rumors and cybercrime, The researcher confirms his view of this that artificial intelligence is the largest and most successful way to identify violations of the aforementioned cybercrime law , or determining the existence of rumors that are subject to the penalties stipulated in the said law; Because artificial intelligence can be programmed to review the published content, read and analyze it, and find out which of these publications or actions represent an electronic breach. The offender is then subject to the provisions of Article (2), Article (3) or Article (9) of the Anti-Rumor and Cybercrime Law.

3.2.5. Problems of using artificial intelligence in policing

The use of artificial intelligence in other areas of criminal justice raises some legal problems. The New Orleans Police (New Orleans is an American city, located in the state of Louisiana and considered one of its largest cities, on the banks of the Mississippi River) Department has begun using a technology company in Silicon Valley to predict crimes before they happen. The technology company Palantir, which supplies the technology requirements, was looking for "free" opportunities to try out new technologies for them to test. Someone has established (He is Carville, as the link between the New Orleans Police Department and technology companies that supply AI technology in crime prediction) a "free and friendly" relationship without regard to the general legal requirements that must be met in such a business partnership between technology companies and security enforcement. The researcher believes that the experience and realization of artificial intelligence predictions in the field of law enforcement in the legal world, and in law enforcement departments requires general procedural scrutiny, level and observance of human rights. A certain awareness and observance of human rights and it would be better to raise the legal problems surrounding this, in order to reach correct legal solutions that are compatible with the different laws. It takes into account human rights, and benefits from the use of technology in the criminal field, whether in the investigation or investigation, or even at the trial stage. It would be wrong to bias ideas about partnership and cooperation to reach the use of AI technology in the areas of policing and criminal justice enforcement in a comprehensive and general way Feldman, Noah Feldman (Professor of Law at Harvard University and a writer on the "Bloomberg" website, 2018).

3.3 The third requirement: the legality of artificial intelligence solutions in investigative work

In this topic, the researcher talks to complement the above about the actual ability of artificial intelligence to play the role of the investigator from a technological point of view. And examining the extent to which there is or is not a problem in the legal determinants of completing the use of artificial intelligence in the criminal investigation. If the legal conditions are not fulfilled, as we will see, how can this be avoided, and to legalize artificial intelligence as an authority to investigate, accuse and refer the accused to trial, as follows:

3.3.1 Applying investigation conditions to artificial intelligence:

The criminal investigation is one of the most important and most dangerous stages of the criminal case, and it has a significant impact on diverting the course of the criminal case, whether by temporary or final preservation, or moving the case and referring the accused to trial (I-Qahtani, Abdullah bin Hussein Al-

Hajraf, previous reference, p. 17). As well as in order to introduce artificial intelligence into the investigation system and give it the authority to charge the accused, and give it the power to refer them to trial, this is a very complex and potentially problematic matter. As well as, in order for the researcher to scrutinize this matter, the researcher talks about the extent to which artificial intelligence can play the role of human intelligence in the field of criminal investigation, and to exercise the full powers of the natural investigator, as follows.

3.3.2 Using Artificial Intelligence for Machine Learning Systems

Current machine learning solutions in artificial intelligence application systems use predictive rules that automatically determine matches or deviations between reality and the knowledge bases stored in the application of artificial intelligence. That is, in data sets, advanced application algorithms can significantly reduce the number of alarms or False or incorrect notifications by filtering for false states, while also detecting other not-missed cases using traditional rules (Abdel-Zaher, Dr. Ahmed, 2020).

3.3.3 Legal and Ethical Problem:

Transparent artificial intelligence systems deal with policy, to implement guidelines and programming. That makes the decision about artificial intelligence more transparent, and more committed to legal and ethical principles, where the transparency intended here relates to the transparency of programmers or operators who are able to define ethical values before programming. And results obtained by artificial intelligence through quantitative selection of ethical values, since it is technically impossible to claim algorithmic transparency. Because when an AI system commits a crime, such as one or more mistakes. And it is always impossible to use algorithms as an excuse to blame bad outcomes (Taddeo, M., & Floridi, L. (2018). This method of managing tax crime evidence is used, in order to bring the accused in tax crimes to trial (Bolifaar, A. H., & Sinaga, previous reference, p 155). In order for human rights to be taken into consideration when using artificial intelligence, the following elements must be met.

3.3.4 The difference between human analysis and artificial intelligence analysis:

It is worth noting that without artificial intelligence, hundreds of hours of video will be watched with forward and backward, so that every object in the video can be extracted and classified, and then converted into a database that can be used. This makes the use of artificial intelligence an important feature that allows investigators to quickly find wanted targets in video surveillance recordings in systems used by security forces in hundreds of cities around the world. This technology "is not limited to saving time only, but is characterized by extreme accuracy, as the theoretical analysis with the naked eye may lose its effect when watching the video after 10 or 20 minutes (D.M), 2017, Artificial Intelligence for Combating Crime Raises Privacy Concerns, previous article.) The artificial intelligence analyzes the evidence (presented scroll) and decides whether it is a narcotic substance or not. If the chemical analysis proves that it is a narcotic, it is considered scientific evidence confirming and strengthening the criminal evidence. (Masterpiece (TOHFAH) d. Fayek Awadin Muhammad, previous) reference, p. 664)

3.3.5 Detecting stock market manipulation:

In a study titled "The Risks and Benefits of Using Artificial Intelligence to Detect Crime," published in Harvard Business Review on August 9, 2018. The authors noted that companies use artificial intelligence to prevent and detect daily thefts resulting from the behavior of some employees who disclose confidential non-public information or disclose inside information in a way that affects the stock exchange (It is known that the disclosure of inside information and trading in the stock exchange based on this inside information is prohibited in the UAE law, and according to Article (39) of Federal Law No. 4 of 2000 regarding the Securities and Commodities Authority). Many banks and major companies are also using artificial intelligence to detect and prevent fraud and money laundering. Not only that, social media companies have also used machine learning techniques to block illegal content, such as child pornography. Companies are constantly experimenting with new ways to use artificial intelligence to improve risk management, and detect fraud faster and more responsively. And one of these important uses is to predict and prevent crimes before they happen. Artificial intelligence algorithms can be used to analyze a lot of company data, predict the financial market situation. As well as to analyze the reasons for the unjustified increase in stock prices, find out their causes, check the availability of leaking internal information from the company and rely on it in trading. Knowledge of illegal practices in the subject of trading in the financial market. So that it is not exploited to harm investors and traders. Thus, artificial intelligence is considered as a regulator of illegal practices harmful to trading in the financial market (Dahshan, Yahya Ibrahim Mohamed Metwally, 2020).

3.3.6 Artificial intelligence based on multiple algorithms:

Artificial intelligence systems are based on many and complex algorithms used in analyzing events and data to reach innovative and verifiable results arising from self-analysis of data from the machine using the basic technology used in the world today in its new and advanced form. For decades, banks have used transaction monitoring systems based on pre-defined binary rules that require a manual check of output, to predict and alert the possibility. It is known that the disclosure of inside information and trading in the stock exchange based on this inside information is prohibited in the UAE law, and according to Article (39) of Federal Law No. 4 of 2000 regarding the Securities and Commodities Authority: "No person may deal in securities based on information other than No person may spread rumors about the sale or purchase of shares, nor may the chairman and members of the management of any company or its employees use their inside information about the company to buy or sell shares in the market, and every transaction he makes is null and void. Any person in violation of the provisions of the previous two paragraphs." Article (41) specified a penalty for violating the prohibition contained in Article (39), and the punishment was as follows: Article (41): "A penalty of imprisonment for a period of not less than three months and not exceeding three years and a fine Which is not less than one hundred thousand dirhams and not more than one million dirhams, or one of these two penalties for anyone who violates the provisions of Articles (36), (37) and (39) of this law." The occurrence of a crime or the identification of variables by artificial intelligence systems ends with the detection of a real criminal or malicious intent (Abdel-Zaher, Dr. Ahmed, 2020).

3.3.7 The extent to which artificial intelligence can be used in the field of investigation

There is no dispute that artificial intelligence has some intelligent behaviors, including: perception and demonstration (i.e., based on evidence or reasonableness, learning, communication, and behavior D.M), (D.T), Artificial intelligence from the basics to the ends, Arabic version, Al-Shorouk Library Edition, p. 1). All of these advantages all serve to improve the ability of artificial intelligence to investigate various crimes, because of its superior ability to remember, gather information, monitor it, ask questions and brainstorm, and identify synonyms and antonyms, to find out the truth. The skill of association of concepts is also implemented in many software, and it is a way to express the concept of sentences in natural language (whether Arabic or English), a method developed in the seventies by “Shank”. And this method helps artificial intelligence in understanding people’s answers. Asking interlocutory questions to them in a way that prompts the offender's questionnaire, assigning the accusation to him, and referring him to trial.

3.3.8 Capabilities of artificial intelligence in criminal investigation

This talk has become a reality, in our modern world, researchers in China have said that they have developed an artificial intelligence robot capable of investigating crimes and prosecuting suspects. It is undeniable that progress in artificial intelligence is accelerating at a rapid, advanced and amazing rate, and may cause the loss of some jobs in the future, due to the use of the machine and the cognitive systems programmed in it that do not know tireless or fatigue, as they are few errors. Because it implements code instructions and commands with high scrutiny and orderly execution, but no one could have imagined in the past that we will see the day when we find that prosecutors will find their jobs exposed to the threat of intelligent machines. The system was invented between 2015 and 2020 using more than 17,000 different criminal cases, according to reports, and that led to the conclusion that an AI bot invented could accuse suspects of using 1,000 different "traits" found in the knowledge rules of a technology-based cyber investigator of artificial intelligence. Also advanced AI software can be used to charge suspects with some of the most common felonies, including fraud, theft, dangerous driving, obstruction of justice, or exposing illegal gambling, among others. The team is working on improving and developing the AI program so that it can take on more complex tasks, such as identifying uncommon crimes and bringing multiple charges against a single suspect. Thus, the smart investigator is able to perform the performance of the ordinary investigator in a way that is closer to the truth, which achieves a major step towards using artificial intelligence to investigate the accused with great efficiency. And to achieve the rights of the accused, which is compatible with justice and human rights in the case of accusation (Hussein, Sami, 2022).

3.3.9 The researcher's opinion

The researcher believes that the criticisms leveled by lawyers and those interested in intelligent justice based on robots, raising the issue of programming error, or giving it wrong data and knowledge systems. Consequently, it results in a wrong application and may make wrong decisions. The researcher sees in this regard the following. As for the errors contained in the software systems, knowledge bases, and precedents set in artificial intelligence, they must be correct and accurate, and contain all the determinants that the robot understands in machine language. Because putting wrong data, this calls for correcting these data and cognitive systems, and does not call at all to cancel the idea of using the artificial

intelligence system in investigations. We have a precise and sure stage before us in order to scrutinize through real experience with real accused, without the decisions made by the artificial intelligence system being enforced without reviewing them. And let it be from the original investigator on the subject of the accusation, and thus we have a trial stage. Also, arising the possibility of feeding the intelligent interrogator robot with invalid data or misleading data, this criticism - from the researcher's point of view, does not affect the artificial intelligence system itself, but rather is aimed at the method of use. The erroneous, or intended, for the failure of the artificial intelligence system to investigate in a correct smart way, which leads to its report of the wrong decisions, and this does not give the error in the smart system, but rather in the way to deal with it, and deal with it.

4. The third subject: The future of artificial intelligence in law enforcement and criminal justice

Artificial intelligence has become part of the reality of human societies. It works in many fields and artificial intelligence uses to facilitate and expedite the completion of various procedures, which benefits society in all the fields it enters into. Artificial intelligence has some negative or positive effects, as it may result in the emergence of a crime directly or indirectly. Because of it, and then significant legal questions arise about its criminal responsibility for these crimes. The legal provisions for crimes committed by smart robots when carrying out the tasks entrusted to them, and that is explained in two demands as follows:

4.1. The first demand: assessing the use of artificial intelligence in achieving criminal justice

Artificial intelligence can contribute to a significant degree in aborting crime before it occurs, by using knowledge base systems and algorithms accurately and quickly. In another way, it is itself an indirect cause of the increase in criminal behavior, and the researcher explains his point of view in this, as the technological development of artificial intelligence in various fields has replaced human labor significantly, and then caused an increase in the unemployment rate which in turn leads to behavior criminal. As it is considered an appropriate case for this criminal behavior, regardless of the individual's response to this case or controlling his behavior, and preventing himself from committing the crime. technological progress, especially the use of robots, is a key factor that leads to the displacement of workers from the labor market, which represents a direct proportion between the use of advanced technology and high unemployment rates. Because with the emergence of mechanization and artificial intelligence on a large scale, it may replace employment and the place of human workers in the labor market.

4.2 Civil responsibility artificial intelligence

The legal axis in the field of civil and commercial transactions includes, in relation to artificial intelligence technology, through the formulation of accurate and clear legal concepts, and within the framework of reviewing the rules of civil responsibility, as specified in Article 316 of the articles of the Civil Transactions Law. As it keeps pace with the extent of legal and professional challenges left by the use of artificial intelligence. It recognizes civil liability for acts caused by artificial intelligence in case of damage is caused by its actions and is caused by these acts. And therefore legal texts must be developed to regulate the use of self-driving vehicles, ships and other self-propelled machines (which are based on

artificial intelligence technology). To determine those responsible for the damage caused by accidents affecting these vehicles and ships, while reviewing the insurance systems against traffic accidents to be applied to devices based on artificial intelligence technology. And taking into consideration the increasing levels of intelligence and automation that gradually weaken the control of the driver or the sailor by the time. The conditions of evidence are accepted taking into consideration the life and technological conditions emerging from the reality of artificial intelligence. And in the case of using artificial intelligence to track or arrest the accused, then the rights of the accused must be taken into consideration (Then it must be taken into account that the rights of the accused are not violated).

4.2- The second demand: the applications of artificial intelligence in the field of criminal justice

4.2.1 The era of knowledge and criminal justice:

The availability and integration of digital databases provides judges with accurate data that helps them perform their jobs. And the world is moving at this time (from the era of knowledge in which we live) towards the use of artificial intelligence in criminal justice investigation systems, to assist investigations, and to automate and facilitate judicial decision-making processes. And the use of risk assessment algorithms in cases related to parole, and algorithms for predicting crime before it occurs, according to precedents and judicial knowledge rules, analyzed by artificial intelligence in a very fast way. To make decisions that contribute to the field of criminal justice, whether by preventing crime or arresting and investigating the offender, and issuing judicial decisions against the accused.

4.2.2 Artificial Intelligence in the Delaware Police:

The Delaware Police is preparing to equip its patrol cars with "smart" cameras to monitor the mechanism for transporting persons fleeing, lost children, or deranged elderly people, through a company specializing in these smart systems. Called "Cuban Technologies", it provides devices equipped with artificial intelligence systems that will analyze the video recordings to determine the mechanisms to be taken. And by comparing the paintings and photos recorded by him with any other features and photos recorded in the databases of the artificial intelligence. Patrol officers will also be provided with an "extra eye" that will assist in visualization and electronic recording of events. This technology is considered to assist police officers (judicial control officers) in focusing on their jobs, achieving efficiency and effectiveness when arresting criminals. And creating an electronic record of events resulting in the seized crime. Through technology that is based on a "front camera" to record and analyze events. This plan is part of the growing trend of using visual AI to fight and reduce crime and improve the public safety, but it also raises concerns among activists, civil rights advocates, and privacy advocates. In their view, that technology may enable activities of confidentiality breaching, and data may be misused.

4.2.3 Artificial intelligence and traffic control system

In 1994, Citroen Company developed an intelligent system equipped with some cameras to monitor traffic, and it can record traffic accidents and call an ambulance. And by analogy with this, artificial intelligence can monitor the road in order to control security and enforce justice.

4.2.4 Artificial Intelligence and Organized Crime

Artificial intelligence can be used in the field of fighting organized crime, which is crime that is based on a fixed institutional organization and has a hierarchical structure of levels of leadership and planning. And a base for implementation and carrying out roles and tasks where artificial intelligence is able to monitor many electronic accounts and e-mail to predict the existence of formations neuroticism that can be controlled, or at least gather the necessary information. Source: Knowledge website, link <https://www.marefa.org>, date of visit 04/24/2022. The US state of Delaware is also distinguished in its legal environment that attracts companies, so it was called the Companies Paradise, and in a statistic for the state of Delaware made in 2007, it was stated that 61 percent of the top 500 American companies were established or moved to Delaware, and this is due to three reasons: The first: The quality of corporate laws in the state of Delaware, and the laws in it depend on flexibility and modernity. Every six months, a comprehensive review of the articles of corporate laws is conducted, and many law schools in America have adopted the study of corporate laws in this state, as well as its jurisprudence. About its criminal activities, to work to abort it, before it appears in the form of a completed crime. And this is in the pre-crime stage, where normal, safe conditions that are not directly and clearly threatened by organized crime. And one of the most important tools to prevent the danger of crime at this stage is monitoring and follow-up and collecting information. As well as the researcher believes that artificial intelligence with its informational capabilities is a trustworthy way to carry out procedures at this stage.

5. Conclusion

At the end of this research, the researcher has talked about artificial intelligence, indicating the nature of artificial intelligence, its concept and nature, its capabilities, and its limits. The researcher explained that artificial intelligence has very great capabilities, and has characteristics that enable it to observe, scrutinize, monitor, analyze, speak linguistically, and ask questions from the reality of knowledge bases embedded in its operating system. In the first subject, the researcher spoke about what AI is and is used in law enforcement, as it is used in inference work, showing how it can be used in inference work. And the researcher did not leave the problem of using AI in inference work, the real problems it entails when used, and demonstrating the impact on human rights. Then the researcher spoke in the second research on the use of artificial intelligence in inference and investigation work. The researcher also explained the subjective characteristics and skills of AI that enable him to investigate or use them, to help enforce them, and pointed out the legal basis for the use of AI in investigating the accused. In the third subject, the researcher talked about the future of artificial intelligence in law enforcement, achieving justice, and applied technological developments in this field.

6. Results

At the end of this research, the researcher concluded a set of important results, namely:

1. The superior ability of artificial intelligence to monitor and analyze many images. This skill can be used to monitor the convicts, or to monitor the public road for the purpose of achieving and maintaining security, without being exposed to any violation of human rights or privacy.
2. The ability of artificial intelligence to machine learning and deep learning of grammar, and the ability to make inference, to enable it to conduct a high-quality investigation with the accused.

3. The ability of artificial intelligence to maintain large databases of information, which enables the development of legal knowledge bases that include many laws and ministerial regulations, which have important references to refer to when predicting of the criminal judgments.
4. The researcher concludes that artificial intelligence can practically carry out police functions such as monitoring and maintaining order, predicting crime and working to prevent it. It is also considered a good tool in the hands of the judicial officer if it is well used in order to enforce justice. It has great powers in the management of the investigation, and knowledge of the conditions of the accused from his features and emotions.

7. Recommendations

1. The researcher recommends that the United Arab Emirates should pay attention to artificial intelligence, machine learning and expert systems from a technological point of view. And try to encourage companies (and then encourage individuals) to rely in their work on artificial intelligence, due to the characteristics of accuracy and speed.
2. The researcher recommends the technological research centers, the necessity of reviewing the algorithms implementing the artificial intelligence system when predicting and preventing crime. And constantly updating them so that we have valid and accurate justice enforcement systems without any potential errors.
3. At the present stage; the researcher recommends the necessity of reviewing the complete criminal legislative framework, and developing texts that ensure the use of artificial intelligence, as a good support machine in all stages of justice enforcement.
4. In the next stage, the researcher recommends amending the legal framework, to make the use of artificial intelligence self-contained, as a member of the judicial police for the purposes of predicting crime, chasing criminals and arresting of the offenders.
5. Since this research on this topic is very accurate, I call on researchers to research again in other aspects related to the enforcement of predictive justice, crime prevention. And the issuance of criminal sentencing by artificial intelligence, until we reach an agreed legal base, which makes the correct legal matters involve artificial intelligence is fundamentally and autonomous from the enforcement of justice in all its stages.

References

- Jamil, Ahmed Adel Othman, and Osman Hussein, 2012, The Possibility of Using Artificial Intelligence Techniques to Control the Quality of Internal Auditing "A field study in Jordanian public shareholding companies", a paper presented to the eleventh annual scientific conference entitled "Business Intelligence and the Knowledge Economy", Al-Zaytoonah University of Jordan College of Economics and Administrative Sciences, Amman, April 23-26, 2012, p. 240.
- Jamil, Ahmed Adel Othman, and Osman Hussein, 2012, The Possibility of Using Artificial Intelligence Techniques to Control the Quality of Internal Auditing "A field study in Jordanian public shareholding companies", a paper presented to the eleventh annual scientific conference entitled "Business Intelligence and the Knowledge Economy", Al-Zaytoonah University of Jordan College of Economics and Administrative Sciences, Amman, April 23-26, 2012, p. 240.

- Bilal, Ahmed Habib and Musa Abdullah, 2019, Artificial Intelligence, Kitab Foundation for Publishing and Distribution, Cairo, 2019 AD.
- Al-Sharif, Mahmoud Salama Abdel Moneim, 2021, The legal nature of crime prediction by artificial intelligence and its legitimacy, The Arab Journal of Forensic Sciences and Forensic Medicine, Volume 3, Issue 2,
- Mosbeh, Dr. Omar Abdul Majeed, 2020, employing predictive justice algorithms in the criminal justice system: prospects and challenges, International Journal of Law, Volume Ten, First Regular Issue, issued by the College of Law, Qatar University Press.
- Abdel-Wahab, Shadi, Al-Ghitani, Ibrahim, Yahya, and Sarah, 2018, opportunities and threats to artificial intelligence in the next ten years, future report, and supplement issued with the periodical "Event Trends", No. 27, Future Center for Research and Advanced Studies, Abu Dhabi.
- Omar, Dr. Ahmed Mukhtar, with the help of a working group, 2008, Dictionary of the Contemporary Arabic Language, Volume One, First Edition, World of Books, Item No. 1969.
- Jamil and Osman, Dr. Ahmed Adel Jamil, Dr. Othman Hussein Othman: The possibility of using artificial intelligence techniques to control the quality of internal auditing, "A field study in Jordanian public shareholding companies", research presented to the eleventh annual scientific conference entitled "Business Intelligence and the Knowledge Economy", Al-Zaytoonah University of Jordan, Faculty of Economics and Administrative Sciences, Amman, The period from 23-26 April 2012 AD.
- Al-Zahiri, Dr. Saeed Khalfan Al Dhaheri, Artificial Intelligence "The New Competitive Force", Future Foresight and Decision Support Center, Dubai Police, No. (299), Dubai, February 2017 Bulletin..
- Musa and Bilal, Dr. Abdullah Musa, Dr. Ahmed Habib Bilal, 2019, Artificial Intelligence: A Revolution in Modern Technologies, the Arab Group for Training and Publishing, the first edition..
- Masterpiece, Dr. Fayek Awadin Muhammad, Limits of Exclusion of Criminal and Scientific Evidence of Artificial Intelligence Obtained by Illicit Methods, "A Comparative Study between the Anglo-Saxon and Latin Systems", Spirit of Laws Journal, Issue (91), July 2020 issue .
- Sadat, Dr. Muhammad Muhammad, 2021, Legal Challenges of Modern Technology, closing session of the University of Sharjah conference, summary of the session published on Al Bayan website, publication date 12-03-2021, link, <https://www.albayan.ae>, and visit date 12/03/2021.
- Abdel-Zaher, Dr. Ahmed, 2020, smart criminal justice...smart judicial police, legal study published on the Bar Association website (Layers Syndicate) , publication date 08/10/2020, <https://egyils.com>, visit date 18/04/2022.
- Al-Balawi, Salem Hamed Ali, 2009, the Modern techniques in criminal investigation and their role in controlling crime, Department of Police Sciences, College of postgraduate Studies, Naif University for Security Sciences .
- Dahshan, Yahya Ibrahim Mohamed Metwally, 2020, criminal protection for the data of companies listed in the stock market, a thesis submitted to obtain the degree of PhD of Laws, Zagazig University, Faculty of Law.
- Ajwa, Abdel-Fattah, 1406 AH, Unemployment in the Arab World and its Relationship to Crime, Arab Center for Security Studies and Training, Riyadh, p. 151, referred to in Hawiti and others, Dr. Ahmed Howeity, Dr. Abdel Moneim Badr, Damba Tierno Diallo, 1998 AD, The Relationship of

Unemployment to Crime and Deviation in the Arab World, Naif Academy for Security Sciences, Riyadh.

Abdel Nour, Dr. Adel Abdel Nour, 2005, Introduction to the World of Artificial Intelligence, King Abdul-Aziz City for Science and Technology, Saudi Arabia.

Al-Hushri, Major General. Dr. Mohamed Al-Amin, 2004, Investigation of Recent Crimes, Studies and Research Center, Naif University for Security Sciences, No. 339, first edition, Riyadh.

UAE Code of the Criminal Procedure, promulgated by Law No. (35) Of year 1992.

Foreign References

- (Lakshmi Sivasubramaniam, Artificial Intelligence, or AI for short, is a combination of computer science, physiology, and philosophy- Sat, 06/09/2007 • 0 I: 00 - Pharmainfo.net).
- Céline Castets-Renard , Le Livre blanc de la Commission européenne sur l'intelligence artificielle : vers la confiance ? Recueil Dalloz , 23 Avril 2020 , † Nathalie Laneret , L'accountability et la protection effective des données personnelles dans un monde digital connect Revue de l'Union européenne , 6 Janvier 2020 ,
- Rigano, C. (2019). Previous references, p 7. Sophie Lacour , « Intelligence artificielle : les solutions algorithmiques permettent de définir plus précisément les profils des clients » , Juris tourisme, 15 juin 2019, n°220
- Taddeo, M., & Floridi, L. (2018). How AI can be a force for good. Science, 361(6404), 751-752. As stated in Bolifaar, A. H., & Sinaga, previous reference