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The AI-IP Conundrum: Exploring the New Dimensions of Creativity & Liability- Human Being Vis-À-Vis Artificial Intelligence

[1]Aishwarya Vatsa, [2]Dr. Gagandeep Kaur

[1]Assistant Professor [SG] & Research Scholar, School of Law, UPES

[2]Sr. Associate Professor, School of Law, UPES

Abstract

The regime of Intellectual Property has always been contoured along the technological advancements, be it Guttenberg's printing press, computer software or the recent advancements like blockchains, NFTs or even Artificial Intelligence. The umbrella of IPR adapts itself to the new dimensions of subject matters. The bundle of rights conferred under the ambit of Copyright protection vests with the author, currently, which refers to a human author. According to Hegel, an author's work is an externalization of his personality, creativity, individuality and artistic fervors, and presently these attributes are specific to mankind[1]. AI systems are assisting and even replacing human beings in creating new subject matters, however, the future is not far away when the onus of this creativity will totally shift to non-human entities.

The notion of authorship is challenged with the possibility of a non-human author, this pertinent question is raised with respect to the subject matter created by AI systems. The works are created by machine learning of the AI systems. The key question raised is '*who the author for such works should be, the developer who has created the AI system, the user who prompts the AI system to generate subject matter or the AI system itself*?' Another quintessential debate it raises is of 'Fair Use Doctrine', since these AI systems such as large language models [LLM] chatbots employ the database available in the public domain and even generate its responses derived from the same, whether it will be a question of infringement, or will it be considered as fair use.

Such AI systems have had a disruptive shift within the Copyright and Patent domain. This paper will aim to explore the new contours of authorship, possibly hinting at a new co-authorship model or even the possibility of creating a legal fiction of 'digital personality' for AI systems, which might be the answer for liability questions. It will carefully analyze the new E.U AI Act, 2023[2], DMCA Act, 1998[3] and comparatively analyze these legislations vis-à-vis the Copyright Act, 1957[4] and Patent Act, 1970[5] to suggest possible amendments and suggest a plausible model to answer the aforementioned questions.

Keywords: Copyright, Authorship, Artificial Intelligence, Digital Personality, Liability

1.2 Introduction

As AI permeates healthcare and entertainment, its junction with intellectual property rights (IPR) is a major issue. Despite fast AI technological breakthroughs, the question for authorship within IP domain for AI systems is still unanswered. This abstract examines the legal vacuum and ethical issues that arise without clear norms.

The complex dynamics of AI-driven intellectual property infringement are not yet regulated by Law. Traditional frameworks fail to incorporate AI systems' autonomy, generating responsibility and accountability concerns. The

[1] Elizabeth Verkey, Jithin Saji Isaac & Anil K. Narendran, Intellectual Property (2d ed., Eastern Book Co. 2021)
[2] Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence (Artificial Intelligence Act), 2024 O.J. (L) 2024/1689
[3] Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998).
[4] Copyright Act, 1957, No. 14 of 1957 (India)
[5] Patents Act, 1970, No. 39 of 1970 (India)

closest response for its liability vests with product liability, negligence claims, insurance bonds and the abstract idea of conferring high intelligence AI creations with a legal personality. Innovators, artists, and rights holders are exposed to AI algorithms exploiting and using their intellectual property without a legal framework.

The growing nature of AI makes IPR violation even more difficult. Machine learning algorithms may imitate copyrighted works, blurring the borders between originality and infringement. Without defined laws, defining fair use and transformative works in AI-generated material is difficult.

AI and intellectual property infringement problems need immediate legislative action, as this abstract shows. It requires a complex strategy that balances innovation and security, taking AI's particular strengths and limits into consideration. To negotiate AI-driven IPR concerns, legal professionals, engineers, and politicians must work together.

In conclusion, AI and intellectual property rights offer a major issue that requires rapid consideration. We can create a more fair and sustainable future for innovation and creativity in the era of artificial intelligence by resolving the legal gaps and ethical uncertainties at this juncture.

1.3 Research Objective & Methodology:

The research aims to delve into the question of authorship for subject matter created by AI systems. It will examine prominent AI tools and analyze the question of its authorship. The methodology adopted will be doctrinal and would examine the existing literature regarding the subject matter, along with an analysis of its privacy concerns as well, which will require an analysis of existing laws.

The primary sources include legislations such as the Information technology Act 2000, the Digital Personal Data Protection Act,2023, Copyright Act, 1957, Patent Act,1970, General Data Protection Regulation (EU) 2016/679 and other related legislations. The question of authorship of AI tools will be discussed at length along with the contemporary facets of its liability as well.

The secondary sources will include Books and related research articles discussing the subject matter. The doctrinal study would majorly include scholarly research articles that are being contributed by authors around the globe. The technology being very advanced and novel, needs serious scrutiny from the legal as well as technological point of view.

1.4 Literature Review:

1.4.1. Ballardini & Van Genderen, Artificial Intelligence and Intellectual Property Rights: the quest or pleading for AI as legal subjects, UNIVERSITY OF LAPLAND (2021)[6]

The paper has discussed human participation as a focal point for discussion of legal positioning of AI application. It has suggested that lesser the degree of human intervention or participation, greater is the need for regulation. The authors have also emphasized in the need for regulation of AI actors as legal persons/subject. The authors have suggested the need to formulate a sui generis system which recognizes artificial intelligence entities as legal persons, giving a possible solution to both issues related to intellectual property regime, as well as providing an answer to the liability questions.

The latter part of the article analyses possible consequences of such a sui generis system. The system will be based on different categories of AI, if the same is completely autonomous, it could be placed under the ambit of legal personhood. The distinction can be in the basis of function of the AI, and the degree of autonomy it possesses.

Research Gap

The article is primarily concerned with legal personhood of AIs, and fails to discuss other challenges that are posed by AI. It talks about AI in general and does not mention autonomous vehicles. It has briefly discussed

[6] Ballardini & Van Genderen(2021), Artificial Intelligence and Intellectual Property Rights: the quest or pleading for AI as legal subjects, University Of Lapland
Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3824826

consequences of legal personhood, and fails to discuss in detail the effects of it, for eg- placing criminal liability on an AI.

1.4.2. Raja N Swamy, AI-IPR Intersection: An analysis of Emerging Issues in Indian Context, SCMS Journal of Indian Management[7]

The article firstly defines the concept of Artificial Intelligence, and the NITI Aayog report,Approach Document for India: Operationalizing Principles for Responsible AI. In the Indian setting, report characterizes AI as "*a star grouping of advances that empower machines to act with more significant levels of insight and imitate the human capacities of sense, appreciation and activity*".[8]The paper then progresses to discuss categories of AI, weak and strong AI, and discussed the Turing Test. The author has also discussed WIPO's classification. The World Intellectual Property Organization (WIPO) propounded three classifications of AI, namely, master frameworks, insight frameworks and common language frameworks. A comparison of Human Intelligence and Machine Learning is also discussed. The paper has discussed that Patent and copyright are the most pertinent frameworks of assurance with respect to AI. The paper then progresses to discuss Copyright and AI.

Research Gap:

The first half of the article talks about AI in general, whereas the second focuses on its legality and implications with respect to IPR. The author has first discussed the fundamentals of patent protection, and then briefly discusses whether AI innovations can be considered as creators, and discusses S.-2 (ja) and S-3(d) in its respect. However, fails to discuss the issues in detail, and also does not refer to precedents in context, and briefly discussed Copyright and AI. Lastly, the suggestions were limited only to uniform policies, which could be implemented by Treaty obligations.

1.4.3. Cameron F.Kerry, Protecting Privacy in an AI driven World, Brookings Institution's Artificial Intelligence and Emerging Technologies Initiative(2020) [9]

The author has introduced the article with the premise of rapid development of AI, and has pointed out that as artificial intelligence evolves, it magnifies the ability to use personal information in ways that can intrude on privacy interests by raising analysis of personal information to new levels of power and speed. The author then proceeds to discuss the consent charade in case of privacy policies of companies. Consumers encounter this approach in the barrage of notifications and banners linked to lengthy and uninformative privacy policies and terms and conditions that we ostensibly consent to but seldom read. The author has pointed out the existing policies relies heavily on the notice and choice model, however, the burden of protecting individual privacy from consumers should shift over to the businesses that collect data.

Research Gap:

The author has started the premise of privacy issues in context of AI almost abruptly, without discussing the various uses of AI wherein such privacy issues can arise. The concept or application of AI to AI driven vehicles are not discussed. The consent debate is discussed in detail, however, other privacy implications such as third party data sharing or malafide use of data are not dealt with. The article primarily focuses on US policies, and has not discussed the US codes regulating self driven vehicles.

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[7] Raja N Swamy(2021). AI-IPR Intersection: An analysis of Emerging Issues in Indian Context, *SCMS Journal of Indian Management*, XVIII, 95-104.
[8] Ibid.
[9] Cameron F.Kerry(2010), Protecting Privacy in an AI driven World, Brookings Institution's Artificial Intelligence and Emerging Technologies Initiative (AIET)
Retrieved from: https://www.brookings.edu/articles/protecting-privacy-in-an-ai-driven-world/

1.4.4. Gunjan Paharia, Intersection Of AI And IPR, How Can IPR Deal With Increasing Influence Of AI? Forbes (2021)[10]

The author begins the article with a quote by Stephen Hawking, "AI is likely to be either the best or worst thing to happen to humanity". The author defines AI and gives a few references to its history. Albeit the laws governing AI and protection thereof are still in the amateur stage, the nuances and complexities relating to AI and IP is a burning topic of discussion. The author has then briefly discussed three branches of IPR, i.e. Patent, Copyright and Trademark, and their intersection with IPR. The author has concluded by highlighting the urgency to develop policies encompassing the prospective issues that might arise with application of AI.

Research Gap:

The scope of the paper is quite limited to the analysis of IPR and AI. The issues are discussed very briefly, only a mere introduction to the implications of using AI is given. No comparison is made with other jurisdictions. The paper fails to provide viable uniform solutions for the various issues highlighted throughout the article.

2. Understanding the Intersection of AI and Intellectual Property Rights (IPR) and the possible liability regimes

The intersection of Artificial Intelligence and Intellectual Property Laws raises infinite questions. The ascertainment of authorship in IP is the focal point from which the exclusive rights flow, and without that, the understanding that we currently have of the domain is ambiguous and uncertain. Section-17[11] of the Copyright Act talks about authorship in various subject matters. Computer software falls within the domain of subject matter of both Copyright and Patent, the author of the source code is identified as the author, and if there is compatible hardware invented, it can also fall in the domain of Patents. The ambiguity arises when we consider the authorship of content generated by AI systems. These AI systems are capable of generating entirely new subject matter with the help of Machine learning and Natural language Processing. In that case, who should be the author? Should we incentivize the real creator or just identify the closest associated human?[12]

The authors intend to delve into the question of authorship, which will ultimately trace the responsibility for the operations of the AI system. Such association of authorship will help find solutions to trace AI liability across other domains as well, such as liability for any accident that occurs involving self-driving vehicles, or other AI systems.

2.1 Exploring Traditional Jurisprudence for Liability Frameworks: Product Liability, Negligence Claims, and Legal Personality for AI Creations

Increasingly, questions of liability for the conduct of artificial intelligence (AI) are becoming more and more important as AI becomes more integrated into society. A deep dive into the difficulties of determining who is to blame when AI-powered systems do damage is presented in this study. It investigates whether or if current legal frameworks, such as product responsibility and negligence claims, may be applied to artificial intelligence. It also investigates the continuing issue of whether or not artificial intelligence creations/systems should be granted the status of legal persons. [13]

Autonomous vehicles and medical diagnostic tools are just two examples of how artificial intelligence systems are increasingly making judgments that have real-world repercussions. Nevertheless, legal frameworks are having

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[10]Gunjan Paharia(2021) Intersection Of AI And IPR, How Can IPR Deal With Increasing Influence Of AI? Forbes Retrieved from : https://www.forbesindia.com/article/legalpowerlist2020/intersection-of-artificial-intelligence-and-ipr-gunjan-paharia/65843/1

[11] Section 17 under Indian Copyright Act, 1957

[12] Conant, A. A. (2023, November 1). Artificial Intelligence and the Intellectual Property Rights Debate. Amini & Conant. https://aminiconant.com/artificial-intelligence-and-the-intellectual-property-rights-debate/

[13] Mowad, L. C., Marks, D. S., Avsec, M. E., & Parker, M. (2024, March 8). Navigating the Intersection of Intellectual Property and Artificial Intelligence. Lexology.

a hard time keeping up with this rate of innovation. As the level of sophistication of artificial intelligence (AI) increases, an important issue arises: who is to blame when things go wrong? These three major areas, namely, product liability, negligence claims, and the idea of legal personality for AI systems, are investigated in this study. These three areas will significantly impact the future of artificial intelligence liability.[14]

2.1.1 Product liability

Scholars have different opinions, some believe that the existing framework of laws will be able to accommodate the issues. However, some on the other hand do believe that it needs tailor-made laws to specifically deal with AIs. Acknowledging the same, Volvo's former CEO Hakan Samuelson announced that the company will accept full liability for any mishap involving any of its Autonomous Vehicles[15], except for cases where its software is hacked. Concepts within the Tort Law regime, like Product Liability, Negligence, and strict liability might be able to encompass the liability of AVs, or, concepts like breach of warranty, and misrepresentation, within the Contract Law regime, these concepts might possess the answers we are all looking for. Andrew Garza writes that "*products liability law is capable of handling the advent of autonomous vehicles just as it handled seatbelts, airbags, and cruise control*"[16]

The application of this approach to AI systems, on the other hand, comes with its distinct set of obstacles. Being able to identify the origin of a "defect" might be challenging since artificial intelligence can be embedded in complicated software or hardware. It is possible that defects are present in the training data, methods, or even unanticipated interactions between the data and the code; these are all variables that are intangible.

The notion of strict responsibility is one way that may be used when applying product liability to artificial intelligence. Because of this, manufacturers would be held accountable for any damage that was produced by their artificial intelligence systems, regardless of whether or not they could have anticipated the problem. Nevertheless, this gives rise to worries over the stifling of innovation. It is possible that manufacturers would become unwilling to create and distribute artificial intelligence devices if they are constantly threatened with litigation for difficulties that they did not anticipate.[17]

Maintaining this delicate balance between product liability and an assurance to the customers is a tricky task, because if we move to a strict product liability regime, it will deter manufacturers from venturing into the area, whereas, on the other hand, if we adopt a lenient approach towards the same, the customers would be sceptic in buying products operating on AI systems, as the liability can be theirs, even without any fault.[18]

2.1.2 Negligence claims:

Claims of negligence provide yet another viable option for addressing the problems caused by artificial intelligence. In this scenario, the plaintiff would allege that the person responsible for the artificial intelligence (the programmer, the developer, or the firm) did not engage in reasonable care throughout the process of developing, deploying, or using the AI, which resulted in injury. [19]

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[14] Kapoor, V. (2024, March 6). Intersection of artificial intelligence and intellectual property rights : challenges and opportunities - iPleaders. iPleaders. https://blog.ipleaders.in/intersection-of-artificial-intelligence-and-intellectual-property-rights-challenges-and-opportunities/

[15] John Villasenor (Aug 25,2021). Products Liability And Driverless Cars: Issues And Guiding Principles For Legislation, Brookings Institution.

[16] Andrew P. Garza(2012). "Look Ma, No Hands!": Wrinkles and Wrecks in the Age of Autonomous Vehicles. 46 NEW ENG. L. REV. 46581, 595 (2012)

[17] Cheong, B. C. (2021). Granting Legal Personhood to Artificial Intelligence Systems and Traditional Veil-Piercing Concepts To Impose Liability. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3857504

[18] Buiten, M. C. (2024, February 27). Product liability for defective AI. European Journal of Law and Economics, 57(1–2), 239–273. https://doi.org/10.1007/s10657-024-09794-z

[19] S. (2023, September 11). AI in Manufacturing: Here's Everything You Should Know. Simplilearn.com. https://www.simplilearn.com/growing-role-of-ai-in-manufacturing-industry-article

For the plaintiff to establish their claim in a negligence action against an artificial intelligence developer, they would need to show three elements:

The question is whether or not the developer has a legal responsibility [duty to care]to protect the safety of the artificial intelligence. A basic chatbot developer, for instance, would have a lower duty of care than a medical diagnostic tool developer. This is because the former would be more complex than the latter.[20]

Did the developer fail to fulfil their duty of care? This is referred to as a breach of duty. This might be due to insufficient testing, a failure to address recognized hazards, or the deployment of artificial intelligence for a purpose that is not appropriate.

Did the duty extend towards the plaintiff? Basically causation: Did the breach of duty directly cause the plaintiff to experience the injury that they now are experiencing? It is necessary to have a successful claim, to establish a direct connection between carelessness and injury.

Claims of negligence have the potential to provide a versatile framework for dealing with the issue of AI liability. On the other hand, they are dependent on determining fault, which may be difficult in sophisticated AI systems that have several components that contribute to the problem.[21]

2.1.3. Digital Personality for Artificial Intelligence Entities

At the moment, artificial intelligence does not have a legal personality. The fact that it cannot be held personally accountable for its conduct or property is a consequence of this. The notion of legal personality is a legal concept that confers specific rights and duties onto an organized unnatural entity. For instance, corporations have legal personality, which enables them to engage into contracts, possess property, and be sued under certain circumstances.

It is a contentious issue whether or not artificial intelligence should be granted legal personality. Scholars agree that AI systems that possess a considerable amount of autonomy may be entitled to the same legal rights and duties as consumers or businesses. In this way, a more transparent structure would be established to allocate causation and accountability.[22] The EU AI Act addressed the possibility of a co-authorship with AI systems, however, the concept did not see the light in the final draft.

Nevertheless, the conferment of legal personality on AI presents several complicated concerns. Who is the owner of or the representative of an "AI person"? What are some ways that human rights and AI rights might be balanced? When it comes to liability and authorship of AI, ascertaining one without the other is not possible.

3. Conclusion: Need for Legislative Action: Balancing Innovation and Security

Picture a huge, undeveloped plain full with promise. The realm of Artificial Intelligence (AI) is like this; it's an area full with opportunities that might change everything. With its potential to transform healthcare diagnostics and speed the development of self-driving vehicles, artificial intelligence is on the cusp of a new age. On the other hand, the potential for AI to revolutionize many industries is immense, but the law regulating its responsible use is moving at a snail's pace compared to the rapid growth of AI.

The use of AI systems have expanded to various verticals including retail & eCommerce, BFSI, Government & Defense, Healthcare & Life Sciences, Telecom, Energy & Utilities, Manufacturing, Agriculture, IT/ITeS, Media

[20] Marr, B. (2024, February 20). Artificial Intelligence In Manufacturing: Four Use Cases You Need To Know In 2023. Forbes. https://www.forbes.com/sites/bernardmarr/2023/07/07/artificial-intelligence-in-manufacturing-four-use-cases-you-need-to-know-in-2023/?sh=617d86743bd8

[21] Wen, Z., & Tong, D. (2023, January 1). Analysis of the Legal Subject Status of Artificial Intelligence. Beijing Law Review. https://doi.org/10.4236/blr.2023.141004

[22] The Evolution of Artificial Intelligence in Legal Cases: Unaveling the Future of Jurisprudence. (n.d.). INDIAai. https://indiaai.gov.in/article/the-evolution-of-artificial-intelligence-in-legal-cases-unaveling-the-future-of-jurisprudence

& Entertainment, Automotive, Transportation and Logistics and other verticals (Construction, education, and travel and hospitality). The global Artificial Intelligence Market size to grow from USD 150.2 billion in 2023 to USD 1,345.2 billion by 2030, at a Compound Annual Growth Rate (CAGR) of 36.8% during the forecast period, according to a new report by Markets and Markets[23].

The proportion with which AI is expanding is worrisome compared to the pace with the Law evolving to accommodate the challenges it poses. The question of authorship remains quintessential, as it is the first step in tracing the liability of AI for infringement of IP rights. The following policy suggestions can be considered in order to create a tandem between the existing Laws and AI generated content:

3.1 **Comprehensive Interpretation Clause**

The key terminologies related to AIs are quite technical and needs to be well defined owing to intricacies involved. Any ambiguity will only leave scope for loopholes in its interpretation and further application. Levels of automation needs to be distinguished and defined separately. Various stakeholders, such as the developer, manufacturer, user, operator should also be well defined.

3.2 Possibility of recognition of Digital/Electronic Person

The recognition of AI entities as an Electronic/Digital personality necessarily involves an understanding of the process of conferring legal personhood on business companies and corporations. If the Law has not restricted the concept to humans, why can't AI be a part of the exception? The liability can be further simplified if there exists an insurance/liability fund for these entities from the parent company. If such requirements become mandatory before the registration of any company which creates with AI systems, the question of liability can be simplified.

3.3 **Requirement of Insurance Bond:**

As mentioned above, the requirement of an insurance/liability fund can make the process of liability claims much easier. A similar solution lies while ascertaining the liability of Autonomous vehicles, The requirement of a mandatory Insurance requirement can provide an interim solution for any injury or claim that might arise from its testing. The requirement can be easily met by the companies prior to testing. However, the financial status qou of smaller research entities and start ups should also be taken into consideration before finalizing the quantum. Both the California[24] and Nevada Code[25] has Insurance requirement of 5 million, as compared to Florida's requirement of 1 million[26].

3.4 Subsequent amendments in IP Legislations

Section-17 of the Copyright Act defines the author, the definition should be amended to include the possibility of an AI system being the author, if the work is purely an outcome of machine learning, the authorship can be shared by the AI[as an electronic person] and the parent company. Similar changes are needed in the Patent Act as well.

The definition of Infringement will also need to include the concept of primary and secondary infringement by AI systems in both the Copyright Act[27][Section-51]and the Patent Act[28][S-104-115].

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[23] Artificial Intelligence Market Worth $1,345.2 billion by 2030, Growing at a CAGR of 36.8% Report by MarketsandMarketsTM. (2023b, August 17). GlobeNewswire News Room. https://www.globenewswire.com/news-release/2023/08/17/2727391/0/en/Artificial-Intelligence-Market-Worth-1-345-2-billion-by-2030-Growing-at-a-CAGR-of-36-8-Report-by-MarketsandMarkets.html#:~:text=As%20per%20the%20report%20by,%7C%20Source%3A%20MarketsandMarkets%20Research%20Pvt.

[24] Vehicle Code – Veh. Division, California , 16.6. Autonomous Vehicles [38750 - 38755] [2012]

[25] Nevada State Code, Chapter-428A, Autonomous Vehicles (2017, amended in 2019)

[26] Florida Code: Autonomous Vehicles (HB/311, 2012)

[27] Section 51 under Indian Copyright Act, 1957

[28] Section 110-115 under Indian Patent Act, 1970

3.5 **Balancing Liability**

The regulation would require to maintain a delicate balance while deciding liability of the various stakeholders. If the liability of the manufacturer is too strict, it would be detrimental for the business owners and the development of the sector would ultimately suffer. However, if the Law places majority of the liability on the owners, they would be sceptic to buy. Hence, maintaining this balance becomes paramount. It can be achieved by identifying the relevant stakeholders and by placing the appropriate Product Liability on the manufacturer and developer and No fault Liability on the user, if the requirements are not met.

3.6. Recognizing Personality Rights under the domain of IPR

This subject matter, although not recognized in India, has already attracted blatant infringement within the country. It is recognized in the EU and US. As, discussed earlier, all the AI systems like FineVoice can identify and mimic someones' voice and how they sound like, and it can be used in any context by an authorized user. AI has aided in its infringement, but, if the Law does not include it within the subject matter, it can be protected from AI systems

Law should always precede innovation, there still exists a legislative vacuum, with respect to to AI systems, which has permeated almost every sphere of our lives. Proper legislative action is required in the field, to ensure that the legal challenges[29] posed by AI systems are recognized and remedied.[30] [31]

[30] Serban, A. C., & Lytras, M. D. (2020). Artificial Intelligence for Smart Renewable Energy Sector in Europe—Smart Energy Infrastructures for Next Generation Smart Cities. IEEE Access, 8, 77364–77377. https://doi.org/10.1109/access.2020.2990123.

[31] RamanathanT. T. (2025). DIFFERENTIAL PRIVACY AND HOMOMORPHIC ENCRYPTION–BASED PRIVACY-PRESERVING ENSEMBLE LEARNING FOR MEDICAL DIAGNOSIS. International Journal of Engineering Sciences & Research Technology, 14(12), 1–13. https://doi.org/10.29121/ijesrtp.v14.i12.2025.1