



NOTE FOR NATIONAL DEFENCE: **AI, Contestability, and Legal Arguments**

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SUMMARY

- ✦ One of the main challenges associated with AI technologies is the lack of preparation in legal systems to deal with the AI-related legal arguments.
- ✦ People, organizations, or governments that are harmed from a potential AI sensory device or an AI algorithm that was used by media platforms such as Facebook or Amazon have to utilize the legal route that is not necessarily and fully or completely prepared to evaluate the AI-related cases.
- ✦ The missing aspects for the evaluation include criteria such as training, data selection, and decision making of AI systems. Lack of evidence and lack of investigators to address the concerns over these criteria are amongst the main challenges and concerns that we are interested to address and investigate.

CONTEXT

- ✦ Contestability is introduced as one of the core principles of AI systems in numerous AI ethics framework studies [1]. It is recommended that one needs a specialized legal platform that is dedicated to AI systems, such that people can legally challenge the abuse or harm caused by these technologies [2].
- ✦ There have been many cases where an AI system breached the privacy of people. These cases have resulted in the argument to be brought upon the court of law, where the AI system affected a [career](#), [privacy](#), or a [freedom](#).
- ✦ There are arguments that AI systems can even influence the result of an election through their [biased recommendation systems](#).

- ✚ What can one do to bring more transparency to AI systems? How can one update the legal systems to be able to deal with issues that arise after controversial decisions that are made by an AI system? What is considered as evidence?

CONSIDERATIONS

- ✚ Legal accountability of AI users in cases that lead to criminal activity [3].
- ✚ Application-specific (example: facial recognition), and domain-specific regulations (example: health) [3].
- ✚ Characteristics of an AI legal framework by [4]:
 - ✚ Presenting proof of malfunction of AI systems.
 - ✚ Contesting and correcting an error.
 - ✚ Human understandable explanation.
 - ✚ How much the decision that is made by the AI system affects the person who is contesting that decision.
 - ✚ Explaining the decisions should extend to private AI decision-makers.

NEXT STEPS

- ✚ Enforcing Transparency-based Technologies for critical applications:
 - ✚ An application that can have a non-negligible effect on individuals, civilians, organizations, or governments should be able to provide a document that includes every controversial decision plus an added explanation for that decision.
 - ✚ One way to generate this explanation is through explainable AI methodologies.
 - ✚ Explainable AI methodologies are a class of tools for which a supervisory algorithm oversees decision of an AI system. It provides explanatory reasoning regarding the decisions made through the inner layers of an AI algorithm (known as black-box) through methods such as decision trees [5].
- ✚ Future of AI Justice system and legal accountability:
 - ✚ One should be able to respond to the problems such as unintended use of AI system for criminal activity. Demand accountability from AI systems that knowingly share sensitive information with third parties.

- ✦ One should also be able to demand accountability from AI technologies that can potentially cause a high-level of health and safety risks to citizens, such as AI in medical applications [6] or AI in autonomous systems.
- ✦ AI-based emerging technologies will bring challenging lawsuits and may impact non-AI related trials in courts.
- ✦ One needs a system with specific attention regarding AI-based technologies that do not take space, interrupts, jeopardize, and collide with the legal process of the other existing lawsuits.
- ✦ Education: One may need Juris doctorates, that besides the law are also familiarized with the bias in AI systems.
- ✦ It is also recommended to establish new laws that address violation of ethics by emerging technologies.
- ✦ AI developers should be able to provide evidence for their argument regarding the logic of their system in a humanly understandable form. However, analyzing this evidence needs specialized and trained investigators.
- ✦ Investigators of AI systems not only can follow the presented argument by the developers but also can identify what type of information could have been included in the reasoning that was neglected by them.
- ✦ One needs investigators who can analyze the evidence and allegation brought upon the court, identify the deficiencies, and present them to the person that is appointed that would pass a judgment on the case.

References

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