

## Redefining Global Security in the Digital Age: Nuclear Proliferation

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Artificial intelligence (AI) and machine learning have become significant in many fields. The development of highly accurate models has a critical influence on international politics, especially in light of nuclear weapons. The role of nuclear weapons is to deter threats because nuclear wars would create destruction and security concerns. The militaries across the world believe that AI applications can determine the future of warfare by increasing the use of AI through surveillance, early warning capabilities, and command and control systems while threats such as economic costs and humanitarian consequences are visible. This creates both negative and positive results. Through the integration of AI in military systems, certain countries focus on improving military capabilities and ensuring strategic stability. While Russia sees AI as a necessity in nuclear warfare, the USA sees it as an important component in maintaining military superiority over its adversaries. Even with different purposes of AI in nuclear warfare, all states come to a general agreement that humans should always play the central role in decisions on nuclear weapons. Further AI has significant implications for nuclear proliferation in numerous regions. This study focused on the present-day context of nuclear proliferation considering it as one of the biggest threats to mankind and AI can take them to uncontrollable levels. This study examined the theories and concepts such as security dilemma and deterrence through existing literature.

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