# CONCLUSION

The threats posed by the use and abuse of AI systems must be well understood to create mechanisms that protect society and critical infrastructures from attacks. Based on the available literature, reports, and previous incidents, we focused on creating a classification of how AI systems can be used or abused by malicious actors. This includes, but is not limited to, physical, psychological, political, and economic harm. We explored the vulnerabilities of AI models, such as unintended outcomes, and AI-enabled and AI-enhanced attacks, such as forgery. This article also describes past incidents, such as the 2010 \_ash crash and the Cambridge Analytica scandal, manifesting the challenges at hand.We also outlined attacks that, to the best of our knowledge, have only been demonstrated through ``proof of concept'', such as IBM's DeepLocker. In response to the risks presented in this paper, we have also explored some possible mitigation strategies. Industries, governments, civil society, and individuals should cooperate in developing knowledge and raising awareness while developing technical and operational systems and procedures to address the challenges.

Although this type of classification is a useful starting point, it does not come without drawbacks. Some AI-enabled or AI-enhanced attacks might not fit the categories established. Further work could use empirical methods to assess whether the classification scheme presented is generalizable and representative. When sufficient data is available, methods such as statistical analysis could be helpful to reach a more complete overview of the threat scenario. Continuously mapping

the risks associated with malicious use and abuse of AI helps to enhance preparedness and increases the potential to prevent and adequately respond to attacks.