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## **Artificial Intelligence in Cybersecurity**

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**Abstract:** The usage of Internet as increased with time, but with the increase in usage of internet, the cases of Cybercrime has also gone up. However, with increase of artificial intelligence, the companies and business are starting to look for AI tools to help against cybercrime. AI is becoming an essential component of every business. Cybercrime is one of the important sectors where AI has begun demonstrating valuable inputs. It is due to the fact that AI is faster than humans to take action and make an alternate plan of action to protect business and send warning against cybercrime. We will discuss recent cyber crime and how AI is used in the industry to defend itself in the long run.

**Keywords:** AI, Cybercrime, Cybersecurity, classification

## REFERENCES

- [1] Bruschi, D., & Diomede, N. (2022). A framework for assessing AI ethics with applications to cybersecurity. AI and Ethics, 1-8.
- [2] Papp, D., Krausz, B., & Gyuranecz, F. (2022). The AI is now in session The impact of digitalisation on courts. Cybersecurity and Law, 7(1), 272–296.
- [3] S. Lee, (2021). AI-based Cybersecurity: Benefits and Limitations. Robotics & AI Ethics, 6(1), 18-28.
- [4] Kim, J., & Park, N. (2020). Blockchain-based data-preserving ai learning environment model for ai cybersecurity systems in IoT service environments. Applied Sciences, 10(14), 4718.
- [5] Mengidis, N., Tsikrika, T., Vrochidis, S., & Kompatsiaris, I. (2019). Blockchain and AI for the next generation energy grids: cybersecurity challenges and opportunities. Information & Security, 43(1), 21-33.
- [6] Sharma, P., Dash, B., & Ansari, M. F. (2022). Anti-phishing techniques a review of Cyber Defense Mechanisms. IJARCCE, 11(7). https://doi.org/10.17148/ijarcce.2022.11728
- [7] Dymicka, A. (2022). Cybersecurity from the perspective of a new technology user. Cybersecurity and Law, 7(1), 27–36. https://doi.org/10.35467/cal/151810
- [8] Tagarev, T., Stoianov, N., Sharkov, G., & Yanakiev, Y. (2021). AI-driven Cybersecurity Solutions, Cyber Ranges for Education & Training, and ICT Applications for Military Purposes. Information & Security, 50(1), 5-8. https://doi.org/10.11610/isij.5000.
- [9] Senouci, S. M., Sedjelmaci, H., Liu, J., Rehmani, M. H., & Bou-Harb, E. (2020). Ai-driven cybersecurity threats to future networks [from the guest editors]. IEEE Vehicular Technology Magazine, 15(3), 5-6.
- [10] Drewek-Ossowicka A., Pietrołaj M., Rumiński J. A survey of neural networks usage for intrusion detection systems. Journal of Ambient Intelligence and Humanized Computing. 2020 May 12;12(1):497–514.
- [11] Laghrissi F., Douzi S., Douzi K., Hssina B. IDS-attention: an efficient algorithm for intrusion detection systems using attention mechanism. Journal of Big Data. 2021 Nov 29;8(1).
- [12] Tsvilii, O. (2021). Cyber Security Regulation: Cyber Security Certification of Operational Technologies. Technology audit and production reserves, 1(2), 57.

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[13] Internet crime compliance center data graph

