

The Role of Generative AI in Cyber Security

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Abstract: *In the ever-evolving landscape of cyber threats, the integration of Artificial Intelligence (AI) has become popular into safeguarding digital assets and sensitive information for organisations throughout the world. This evolution of technology has given rise to a proliferation of cyber threats, necessitating robust cybersecurity measures. Traditional approaches to cybersecurity often struggle to keep pace with these rapidly evolving threats. To address this challenge, Generative Artificial Intelligence (Generative AI) has emerged as a transformative sentinel. Generative AI leverages advanced machine learning techniques to autonomously generate data, text, and solutions, and it holds the potential to revolutionize cybersecurity by enhancing threat detection, incident response, and security decision-making processes. We explore here the pivotal role that Generative AI plays in the realm of cybersecurity, delving into its core concepts, applications, and its potential to shape the future of digital security.*

Keywords: Cyber threats, Safeguarding digital assets, Cybersecurity, Security decision-making, Future of cybersecurity