Cyber Attacks Management in IoT Networks Using Deep Learning and Edge Computing

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Abstract : This survey delves into the complex realm of Internet of Things (IoT) security, highlighting the urgent need for effective cybersecurity measures as IoT devices become increasingly common. It explores a wide array of cyber threats targeting IoT devices and focuses on mitigating these attacks through the combined use of deep learning and machine learning algorithms, as well as edge and cloud computing paradigms. The survey starts with an overview of the IoT landscape and the various types of attacks that IoT devices face. It then reviews key machine learning and deep learning algorithms employed in IoT cybersecurity, providing a detailed comparison to assist in selecting the most suitable algorithms. Finally, the survey provides valuable insights for cybersecurity professionals and researchers aiming to enhance security in the intricate world of IoT.