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## **Cyber Security Threats**

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Abstract: The relentless advancement of digital infrastructures has precipitated an era of unprecedented cyber vulnerabilities, wherein industries grapple with an ever-evolving array of sophisticated threats. Adversaries employ algorithmically enhanced offensive cyber mechanisms, leveraging artificial intelligence, adversarial machine learning, and polymorphic malware to circumvent conventional security paradigms. The advent of Ransomware-as-a-Service (RaaS) has further exacerbated the threat landscape, democratizing cybercriminal capabilities and enabling the proliferation of highly adaptive extortion campaigns. Concurrently, the integration of hyperconnected ecosystems—spanning cloud-native architectures, ubiquitous IoT deployments, and the pervasive rollout of 5G networks—has exponentially expanded the digital attack surface, rendering legacy security frameworks obsolete.

Keywords: Ransomware-as-a-Service (RaaS), Cloud-native architectures, IoT deployments, 5G networks

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