

Enhancing Email Security: Integrating AI for Advanced Threat Detection

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Abstract

Email remains a leading vector for cyberattacks, with threats ranging from common issues like spam and malware to sophisticated schemes like phishing, spear phishing, spoofing and ransomware. These attacks can result in significant data breaches, financial losses, and operational disruptions. Due to the multitude of threats that can occur when using email, special attention was given to the main threats and how we can avoid them. Integrating Artificial Intelligence into email security offers a powerful solution by leveraging machine learning algorithms to detect and eliminate threats in real time. Furthermore, Artificial Intelligence systems can analyze large amounts of data to detect suspicious patterns, predict potential attacks, and adapt to new threat landscapes. This article explores the potential threats when using email and proposes an automated solution based upon artificial intelligence (AI) capable of detecting spam emails.

Index terms: threats detection, artificial intelligence, email security

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