

Security in Cyberspace: A Comprehensive Review of COVID-19 Continued Effects on Security Threats and Solutions in 2021 and the Trajectory of Cybersecurity Going into 2022

Authors : Mojtaba Fayaz, Richard Hallal

Abstract : This study examines the various types of dangers that our virtual environment is vulnerable to, including how it can be attacked and how to avoid/secure our data. The terrain of cyberspace is never completely safe, and Covid- 19 has added to the confusion, necessitating daily periodic checks and evaluations. Cybercriminals have been able to enact with greater skill and undertake more conspicuous and sophisticated attacks while keeping a higher level of finesse by operating from home. Different types of cyberattacks, such as operation-based attacks, authentication-based attacks, and software-based attacks, are constantly evolving, but research suggests that software-based threats, such as Ransomware, are becoming more popular, with attacks expected to increase by 93 percent by 2020. The effectiveness of cyber frameworks has shifted dramatically as the pandemic has forced work and private life to become intertwined, destabilising security overall and creating a new front of cyber protection for security analysis and personal. The high-rise formats in which cybercrimes are carried out, as well as the types of cybercrimes that exist, such as phishing, identity theft, malware, and DDoS attacks, have created a new front of cyber protection for security analysis and personal safety. The overall strategy for 2022 will be the introduction of frameworks that address many of the issues associated with offsite working, as well as education that provides better information about commercialised software that does not provide the highest level of security for home users, allowing businesses to plan better security around their systems.

Keywords : cyber security, authentication, software, hardware, malware, COVID-19, threat actors, awareness, home users, confidentiality, integrity, availability, attacks

Conference Title : ICCNSS 2022 : International Conference on Computer Networks and Systems Security

Conference Location : New York, United States

Conference Dates : June 02-03, 2022