



## Cyber Security in Big Data Era

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### Message from the Guest Editors

Computer and network security is, has been, and will be one of the most critical issues to be faced by industries and people all over the world. Techniques to detect attacks and manage the resulting risks have been developed and deployed, but they must be continuously improved in a cat-and-mouse play with cyber criminals who are constantly evolving their attacks to stay one step ahead.

In the era of big data, systems can improve tools to detect and manage attacks from humans or malware by collecting and analyzing a huge amount of information on the actual behavior of a system and of its users. The purpose is to integrate current detection methodologies with big data ones to continuously improve detection of vulnerabilities and malware and use the time savings from automated security intelligence to identify threats and improve containment processes. The resulting approach can offset human shortcomings in detecting and handling cyberattacks even if they have never been seen before, because they exploit vulnerabilities that are not public yet. This will strongly improve both the security and resilience of ICT and OT systems.

