Cyber Security

Editors | **Darren Samuels and Dr. Thomas Rohsenow**

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Arcler Press LLC
708 3rd Avenue, 6th Floor
New York, NY 10017
United States of America

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ISBN: 978-1-68094-105-0

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Contents

Cyber Security

Cyber security is the collection [illegible]lines, risk management approaches, actions, training, best practices, assurance and technologies that can be used to protect the cyber environment and organization and user's assets. Organization and user's assets include connected computing devices, personnel, infrastructure, applications, services, telecommunications systems, and the totality of transmitted and/or stored information in the cyber environment. Cyber security strives to ensure the attainment and maintenance of the security properties of the organization and user's assets against relevant security risks in the cyber environment.This book has been divided into fifteen chapters. The first chapter reviews that the socio-technical system is used to describe the function and form that people, physical equipment, hardware and software, laws and regulations that accompany the organizations, data and procedures. Second chapter presents the GL model literature and modifying the GL model to incorporate externalities. Chapter three describes the application of mixed method in developing a cyber-terrorism framework. Chapter four shows that, the security breaches of information stored into ICT assets have remained difficult to solve the percent of major threats actions and associated potential assets been exploited. Clustering methods for replicated criminal websites is described in chapter five. Chapter six reviews that the intrusion detection and prevention system has become important tools in network security. This module can be categorized into two classes, Network IPS and Host IPS. Chapter seven shows a more holistic way in describing cyber terrorism is useful in understanding the concept of cyber terrorism. Chapter eight explains web application authentication levels, risks affecting web applications and vulnerability scenario of web security and log management. Digital forensics and cybercrime data mining is described in chapter nine. Chapter tenth shows the resilience to leaking dynamic systems modeling of information security. Chapter eleven focuses on internet future in the field of business development. Chapter twelve shows the experimental evaluation of cisco ASA-5510 intrusion prevention system against denial of service attacks. Cyber-physical security of wide-area monitoring, protection and control in a smart grid environment is presented in thirteenth chapter. An empirical evaluation of IP traceback through (authenticated) deterministic flow marking is presented in fourteenth chapter. Chapter fifteen reviews that software is one of the most important and yet one of the most economically challenging techniques of this era. A good software is a software that is usable, reliable, defect free, cost effective and maintainable.

Darren Samuels is an M.S in Computer Science. He is pursuing Ph.D. in Telecommunication and Networking. He has written several articles, research report, and papers on digital signal processing and innovative techniques in networking. His interest research areas are TCP/IP network, optical transport network, and selective switching and WDM.

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ISBN 978-1-68094-105-0
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