



# CYBEROLOGY

AN OPTIMIZED APPROACH  
TO THE CYBER-WORLD

Edited by Mohd. Shahid Husain,  
Mohammad Faisal, Halima Sadia, Tasneem Ahmed,  
Saurabh Shukla, and Adil Kaleem

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# Cyberology

This book provides an insightful examination of cybersecurity threats and their implications across various sectors, including healthcare, agriculture, and government. It covers fundamental concepts in cybersecurity, including cybercrime laws, cyberbullying, and emerging technologies. It discusses challenges in detecting and preventing cyber threats and analyzes trends in cyber warfare and resilience. This book serves as a resource for understanding the complex relationship between technology and society, equipping readers with the knowledge needed to navigate the evolving cyber landscape. It is for scholars, students, and professionals interested in cybersecurity and challenges.

This book

- introduces the fundamental principles and theories of cybersecurity, focusing on the relationship between humans and technology;
- details various cyber threats affecting the digital world, healthcare, and agriculture, emphasizing their real-world implications;
- discusses issues like cyberbullying, threats in cloud computing, and vulnerabilities in cyber-physical systems;
- examines the difficulties in detecting cybercrimes, addressing advanced persistent threats, and fostering cyber resilience;
- analyzes current trends in cyber warfare and terrorism, providing insights into new security challenges.



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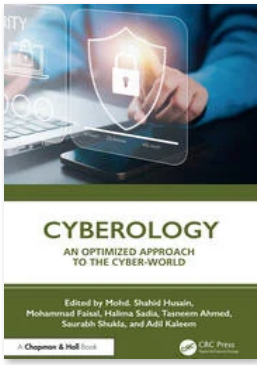
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Chapter

# Transformative Impact

Social Robots Redefining Industries and Services

By *Farhina Sardar Khan, Priyanka Bajpai, Syed Shahid Mazhar*

Book [Cyberology](#)

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## ABSTRACT

The emergence of social robots has brought a significant transformation in robotics, sparking a paradigm shift in human-robot interactions. These innovative creations, endowed with intelligence and emotional capabilities, have begun to transcend the boundaries of technology, prompting us to explore the delicate balance between machines and humans. The transformative and ever-advancing technology with the potential to enhance society is social robotics, which focuses on creating intelligent machines capable of interacting and engaging with people. This chapter examines how social robots have intertwined in many fields and how they are influencing people and societies. Healthcare, education, and social interactions have shown potential for social robots. They support medical personnel in healthcare environments by keeping track of vital signs, caring for patients, and offering companionship. Particularly in environments with a shortage of human resources, these robots can reduce the workload of healthcare professionals and improve the standard of care. Social robots in education can act as mentors and tutors, providing pupils with individualized learning experiences. This chapter attempts to study and examine real instances where humans and robots coexist in different places. It aims to explore the prospects and facets that discuss social robots working while keeping a human-centered approach.