The Letter from Prof. Maj. Gen. (Ret.) Isaac Ben-Israel

Dear ACM TIST Cyber Security Special Issue Board Members, Editors, and Readers. The issue of cyber has evolved into one of the most talked about issues on our planet. From an obscure field that was once the exclusive domain of intelligence and security specialists, cyber has become the “topic of the day” in almost every possible forum. The alleged Russian intervention in the recent US presidential election and subsequent expulsion of Russian “diplomats” from the United States has added a new political element to cyber warfare. Obviously, the term *cyber* is not only about hacking into computers for the purpose of extracting information (espionage), obtaining user passwords (phishing), hacking into computer systems and disabling them (cyber attack), hacking into and dominating social media (influence), or preventing such hacking (cyber security). It is also about the new phenomena of hacking into computers, encrypting the data they contain, and releasing them for ransom (ransomware). So, what really constitutes a cyber threat and how can we define cyber security?

My own definition is extremely simple: the cyber threat is the dark side of computers. As we become increasingly computerized, computer chips get integrated into more and more everyday items. Essentially, we are facilitating more communication between those chips to make our lives more efficient and ultimately benefit human society, as evidenced by the Internet of Things (IoT). However, due to this computer technology development, we are becoming increasingly dependent on computers and on the communication between them. This increased dependence also creates a newfound weakness as the “bad guys” (and human society will always include bad guys) will be able to exploit that dependence—not for the benefit of society, but to its detriment—and expose the dark side of computers. Cyber security is about minimizing that dark side.

I would like to congratulate the ACM management team on the publication of the special issue as well as the guest editors who turned their vision into a reality. The topics touched on in this special issue were discussed at an important academic conference during Cyber Week, which takes place annually at Tel Aviv University. This conference acts as an important global platform for interdisciplinary academic research on all matters relating to cyber security. I truly appreciate the authors whose papers were chosen to be included in this issue and their overall contributions to the field of cyber research.

Best regards,

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