IS YOUR SMART CITY A RESILIENT CITY?

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Abstract − Practitioner talk.

In a Smart City, there are many data-processing layers between sensors for the field data acquisition and the decision layer, which makes use of the modern approaches for data analytics through the application of artificial-intelligence (AI) techniques. Each layer can introduce additional vulnerabilities into a Smart City system. The attack landscape of a Smart City can be very complex and can include diverse types of threats (physical, cyber, operational, organizational, etc.). It is also possible for these layers/threats to be combined in a single attack/threat event. From these attack landscapes, much greater attention has been paid, in recent years, to the cyber-attack landscape. This trend has been caused, at least in part, by the fact that Smart Cities cannot operate without a "strong" support of Information Technology. This in turn has resulted in the faster evolution of the information technology, which has contributed to the rapid evolution of the cyber-attack landscape in Smart Cities. Big Data Analytics can help the detection of many types of threats, which have been mentioned above. It can also contribute to a better correlation among different types of negative events. Unfortunately, challenges arise, with the use of Big Data Analytics, due to different restrictions and the need to comply with regulation in the realm of data privacy and the data-misuse (prevention) directives. Some of these challenges will be presented and analysed in the current paper. After an introduction to the above research topics related to the use of digital technologies in smart cities, the presentation describes organization and issues covered by the Community of Safe and Secure Cities (COSSEC) inside the H2020 IMPETUS Project.

Keywords: AI, Big data, threat landscape, data privacy

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