

Book Title *Green Internet of Things for Smart Cities: Concepts, Implications, and Challenges*

Chapter Author(s) A. Singh (<https://orcid.org/0000-0001-8880-780X>)
*K. C. Purohit, (<https://orcid.org/0000-0002-3188-529X>)
R. Jaswal, Graphic Era (deemed to be University)
R. Aggarwal, Graphic Era (deemed to be University)

Chapter Title IOT based bomb defusing and surveillance robot

Abstract: Border Security is most important in any country and many lives are lost due to land mines and bomb blasts. Many lives are compromised during the bomb defusing process also. This work focuses on the design and development of a robot based on Internet of things (IOT). The robot is designed to perform bomb defusing, Land mines detection and defusing. It is also used in surveillance at borders. This robot can work in both autonomously as well as manually. The bomb defusing task is performed based on the image captured by the robot and it will be sent back to the control room with the location to analyze the threat, then the robot is used to defuse the bomb remotely from the control room. The surveillance task is performed to find out the intruders at borders day and night, where the army personnel can't perform the task of surveillance. The images are sent to the control room for analyzing the threat. The robot is designed such that it can detect the land mines using an inbuilt metal detector. [178 words]