Internet of Things based 5G Infrastructure for Securing Transportation Facilities in Smart Cities

Abstract

The fifth generation (5G) is going to dominate in the smart cities where 5G provides all the facilities with maximum security and safety. Regarding transportation services, unnecessary accidents rates are increasing with cyber attacks and threats. All security issues for 5G based infrastructure will be facing many challenges such as secure transportation services which is one of the 2030 initiatives in many countries. Despite many security solutions, developing energy-efficient cryptographic algorithms are recommended to secure the future transport systems which not only improve the security but also reduce the cost. The main aim of this strategic research is to develop a secure transportation system using efficient security solutions which not only reduce the exorbitant accident rates but also increase safety system that enhances the livability of smart cities. Employing secure multi-level IoT and 5G based infrastructure used within the transportation systems will be an efficient method. In this system, appropriate applied cryptographic algorithms will be employed to improve transportation services. According to the research idea of this project, the proposed model of the future transportation system will be delivered with better security solutions. In expected results, the
dynamic security solutions will be considered. They are vital requirements to minimize accidents and secure smart cities. This research will be leading us to implement an effective security solution for future transport systems. Therefore, each passenger who is driving or using driverless vehicles will be protected from the evolving attacks within the smart cities.

References


**Index Terms**

Computer Science, Security

**Keywords**

Security; IoT; 5G based infrastructure; Smart cities; Transportation