

# **IoT-Based Safety Management System Through Smart Street Lighting: A Step Toward the Humanistic Society's Safety for Women**

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**Abstract.** The country Sri Lanka is becoming unsafe for women as well as human society. The past decade has been a tumultuous one with rapes, murder, harassment, etc., have put pressure on the quality of life around the world as well as in Sri Lanka. The Internet of Things (IoT) plays a significant role in automating a variety of processes, including health monitoring, traffic management, agricultural irrigation, street lighting, entertainment, classrooms, etc. Streetlights are now operated manually, which wastes a significant amount of energy globally and needs to be altered. In this paper, I looked at the application of IoT in creating smart streetlight safety systems for the modern day. In addition to developing street lighting for the entire world, finding solutions to the energy crisis is crucial. In this paper, I suggest an IOT-based system called the IoT-based smart streetlight and women's safety system, which is of great significance since it helps women who are in danger overcome these challenges. The Smart Street Light System immediately solves urgent issues including, among others, maintenance costs, women's safety, and criminal detection. To ensure safety and respond quickly to incidents, our proposed system includes IoT, telecommunication technologies, one machine-to machine (M2M), and real-time monitoring. Nanotechnology might be used to reduce the size of the module. In streetlights, this takes the form of new, upgraded safety lighting. The goal is to establish an IoT environment.

**Keywords:** *Internet of Things, Smart Street Light, Safety System, Microcontroller, Microprocessor*