IoT Automatic Street Light System

By: Rinay Shah, Chanwoo Oh, Aaron Kammula

What is the problem?

• Street lights remain on throughout the night, even if a car is not on the road.

• Wasting light, which cost the government millions of dollars.



How does it affect our society?

• Lighting accounts for 10–38% of the total energy bill in typical cities worldwide.

 Street lighting is a critical concern for public authorities in developing countries because of its strategic importance for economic and social stability.

 Inefficient lighting wastes financial resources every year, and poor lighting creates unsafe conditions.

• Energy efficient technologies and design mechanism can reduce cost of the street lighting.

Our Design

 Our design is unique because it uses both a sound sensor and ultrasonic sensor to determine when the leds should turn on and off.

 Our design can be used to address home security as well by reducing energy consumption and saving the homeowner on light bills.

Our design is especially efficient in roads that are less travelled.

Future Improvements

 The sound sensor can alert the police if there is a car crash because of the impact

 Cameras can be activated with the emergency light to determine if there actually has been a crash.

 This system can be used in school too where if there is a gunshot police can be notified automatically

