

# Leveraging RFID for Road Safety Sign Detection to Enhance Efficiency and Notify Drivers

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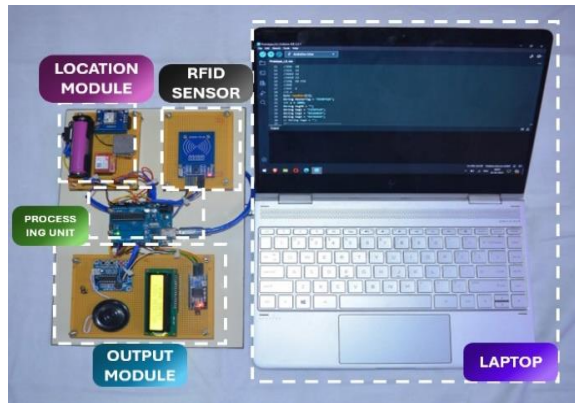
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## Objectives of the proposed system



- 01 Improve Road Safety:**  
The primary objective is to enhance road safety and prevent loss of life.
- 02 Efficient Communication:**  
Implement efficient communication protocols between the RFID system to ensure quick transmission of information.
- 03 Scalability:**  
Design the system to be scalable, allowing for integration with other smart city infrastructure in the future.
- 04 Robustness:**  
Ensure the system is robust and can operate reliably in various weather conditions and physical impacts.
- 05 Sustainability:**  
Design the signboard to be energy-efficient. This aligns with the broader goal of promoting environmentally practices.

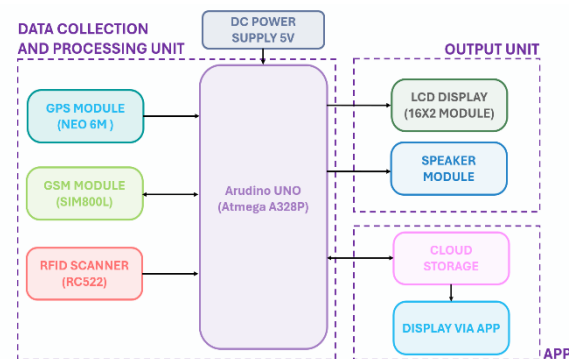
## Hardware construction of the proposed system



## CONCLUSION

The proposed solution reduces the road accidents due to fog and other harsh environments since it integrates signboards by ultra-high frequency passive tags. The proposed system, therefore, aims at decreasing the number of deaths and road safety. It uses RFID-technology in providing real-time alerts and updates to drivers to enhance safety in driving.

## Block Diagram of the proposed system



## Circuit Diagram of the proposed system

