

Automatic Pothole Repair System

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Abstract: *The "Automatic Pothole Repair System" presents a smart and efficient solution to road damage maintenance using IoT and embedded systems. This project automates the identification and repair of potholes using ESP32 microcontroller, GPS and ultrasonic sensors, and robotic arms for repair, significantly reducing manual intervention. The robot identifies pothole locations, calculates dimensions, sends data to a cloud server, and performs on-spot repair with concrete mix. The system integrates a web interface for live monitoring and uses Python Anywhere for cloud hosting. This approach enables real-time analytics, low-cost repair, improved road safety, and seamless automation in road infrastructure management.*

Keywords: *Python*

