



CITYSCAPE GREENERY : SMART MANAGEMENT of URBAN FOREST

UNDERGRADUATE THESIS

Submitted as one of the requirements to obtain

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ABSTRACT

An urban forest is a green space within a city that consists of various trees and plants. It's like a little oasis of nature amidst the urban hustle and bustle. These areas aim to sequester and store carbon, improve the microclimate, and provide a relaxing environment for people. The urban forest ecosystem faces several critical challenges that demand immediate attention and comprehensive solutions.

One significant issue is the persistent threat of forest fires, which can be mitigated through the implementation of temperature and smoke detectors strategically placed throughout the forest. Identify the objectives and scope of the monitoring forest system. This could include detecting wildfires, monitoring temperature, humidity, and other environmental factors, and preventing deforestation and illegal activities. Choose appropriate IoT sensors and devices that can measure the necessary parameters and transmit the data to a central system.

Implement a user interface and notification system that allows authorized personnel to monitor the forest in real time, receive alerts, and take appropriate actions. This includes a mobile application built in notification. The proposed technological intervention aims to be compatible with standard clinical methods, optimize human resources, adapt to different infrastructures, ensure privacy and security, and overcome budget constraints. From providing educational content and preventative measures to tracking detection features and comprehensive access to breast care, the proposed program aims to provide users with knowledge and actionable steps for proactive health management.

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