**Government College of Engineering, Jalgaon**

**Computer Engineering Department**

**Title: Go Green Using Satellite Image Processing**.

A Synopsis Submitted

in Partial Fulfillment of the Requirements

for the Degree of

# **Bachelor in Technology (COMPUTER)**

# By

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**Introduction:**

Our project idea is to develop an application to detect greenery in specific area, captured with Google Earth Pro software (i.e. Satellite Image of Earth). Our aim is to detect number of trees, calculate amount of oxygen released by these trees in that particular area. On the basis of number of people (population in that area) provided as an input by the user, we are doing the analysis of amount of Carbon dioxide exhaled by these people as well as Carbon dioxide generated due to the automobiles running in that locality. On the basis of this data collection we can analyze the amount of Oxygen required in that locality or it is present in ample amount. If the analyzation tells that the amount of Oxygen is less than the amount of Oxygen should be available, this will indicate that there are less number of tress in that area or the greenery should be increased. Overall objective is to detect the air quality index from the above data analysis.

**Problem Statement:**

To detect trees and analyze air quality in specific area.

**Objectives:**

* **Count numbers of trees**: In this objective we are counting no of trees form image taken form Google Earth Pro.
* **Amount of Oxygen released:** In this objective we are calculating amount of oxygen released by number of trees detected in that area.
* **Amount of Oxygen consumed:** In this objective we are calculating amount of Oxygen consumed or required in that locality.
* **Amount of Carbon dioxide generated:**

1. In this objective the aim is to analyze the amount of Carbon dioxide generated by the peoples in that locality.
2. Also considering the amount of Carbon dioxide generated due to the automobiles travelling from that area daily.

* **Greenery result:** Considering the data of amount of oxygen and carbon dioxide, we can analyze the final result of ample presence of greenery in that area.
* **Calculating air quality index.**

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