

## Phase 2: Innovation

### 1.Triangulation:

This method involves estimating the user's location by measuring angles to satellites with known positions. By intersecting these angles, the device can approximate its location used in delaunay triangulation and incremental triangulation

### 2.Spatial Analysis:

This module deal with spatial relationships, proximity, and spatial patterns used in spatial interpolation and sapatial clustering

### 3.Data analytics and prediction:

It's play a vital role in extracting meaningful insights from large datasets and making accurate forecasts future outcomes in linear regression and logistic regression

### 4..Traffic Light Control :

This module determine the optimal timing for traffic signals at intersections based on traffic flow, demand, and congestion levels using fixed time control.

### Congestion and control:

congestion and control in public transportation are significant challenges faced by urban areas. Optimization strategies can greatly improve the efficiency and effectiveness of public transportation systems

### Route optimization:

Analyzing routes to ensure they cover high-demand areas efficiently, reducing redundant routes and optimizing schedules.

- 1.Dijkstra's algorithm
- 2.Genetic algorithm

