

Traffictelligence:Advanced Traffic volume
estimation with Machine Learning

By

(Vyshnavi)

(Keerthana)

(Maneesha)

A Dissertation Submitted to

SRI VENKATESWARA COLLEGE OF
ENGINEERING AND TECHNOLOGY, An
Autonomous Institution affiliated to
‘JNTU Ananthapur’ in Partial Fulfilment of
the Bachelor of Technology (*Computer
Engineering*) with Specialization in
*Artificial Intelligence and Machine
Learning*.

May 2024



**SRI VENKATESWARA COLLEGE OF
ENGINEERING AND TECHNOLOGY**

R.V.S. Nagar Tirupathi Road, Andhra Pradesh– 517127

Problem Statement Definition:

Traffictelligence:Advanced Traffic volume estimation with machine learning

The objective of this project is to address the critical need for advanced traffic volume estimation using machine learning techniques. With increasing urbanization and the consequent rise in vehicular traffic, accurate prediction of traffic volume is essential for optimizing traffic flow, planning infrastructure, and enhancing overall urban mobility. Traditional methods of traffic volume estimation often rely on manual data collection or simplistic models, leading to limited accuracy and scalability. To tackle this challenge, TrafficTelligence seeks to leverage advanced machine learning algorithms to develop a robust and scalable solution for traffic volume estimation. By harnessing data from various sources such as traffic cameras, sensors, GPS data, and historical traffic patterns, the project aims to create predictive models capable of accurately forecasting traffic volume in real-time.

Technical Architecture:

