REQUIREMENT ANALYSIS

Technology Stack

Date	28 JUNE 2025
Team ID	LTVIP2025TMID59766
Project Name	TrafficTelligence: Advanced Traffic Volume Estimation with Machine Learning
Maximum Marks	4 Marks

Technology Stack:

Layer Technology

Frontend (UI) React.js / Angular / Vue.js, HTML5, CSS3, JavaScript, Tailwind CSS

/ Bootstrap

Backend Python (Flask/Django/FastAPI), Node.js (optional)

Machine Learning TensorFlow, Scikit-Learn, PyTorch, OpenCV (if CV used)

Database PostgreSQL, MongoDB, MySQL

Data Storage AWS S3, Google Cloud Storage, Azure Blob Storage

Cloud & Deployment AWS / GCP / Azure, Docker, Kubernetes, CI/CD pipelines

Data Streaming

(Optional) Apache Kafka, MQTT (for real-time IoT sensor data)

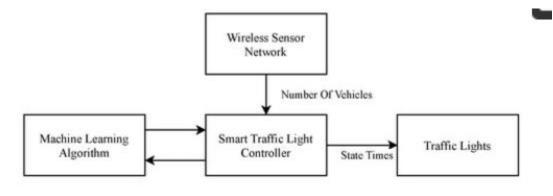
Visualization Plotly, Dash, D3.js, Power BI, Tableau

APIs & Integration

REST APIs, GraphQL, Google Maps API, Weather APIs, Traffic

Sensor APIs

Security OAuth 2.0, JWT, HTTPS, Firewall, Data Encryption



(a)

