



# **SRI SHANMUGHA COLLEGE OF ENGINEERING AND TECHNOLOGY**

**BIOMEDICAL ENGINEERING**

## **PUBLICTRANSPORTATION OPTIMIZATION**

**PRESENT BY**

**R.NEELAVENI**

**V.MYTHILI**

**A.ANITHA**

**V.R.MOUNIKA**

# INTRODUCTION

- ❖ Transportation optimization is the process of analyzing shipments , rates and constrains to produce realistic load plans that reduce over all freight spend and gain efficiencies across entire transportation networks.

# OBJECTIVE:

- ❖ The goals of transportation optimization should include the reduction of costs and creation of greater operational efficiencies , all while increasing customer satisfaction.
- ❖ Not a small task , and one that requires constant analysis and monitoring.

# PROBLEMS:

- ❖ Road accident controlling.
- ❖ High speed controlling.
- ❖ Petrol detecting.

# CONTROL OF TRANSPORTATION:

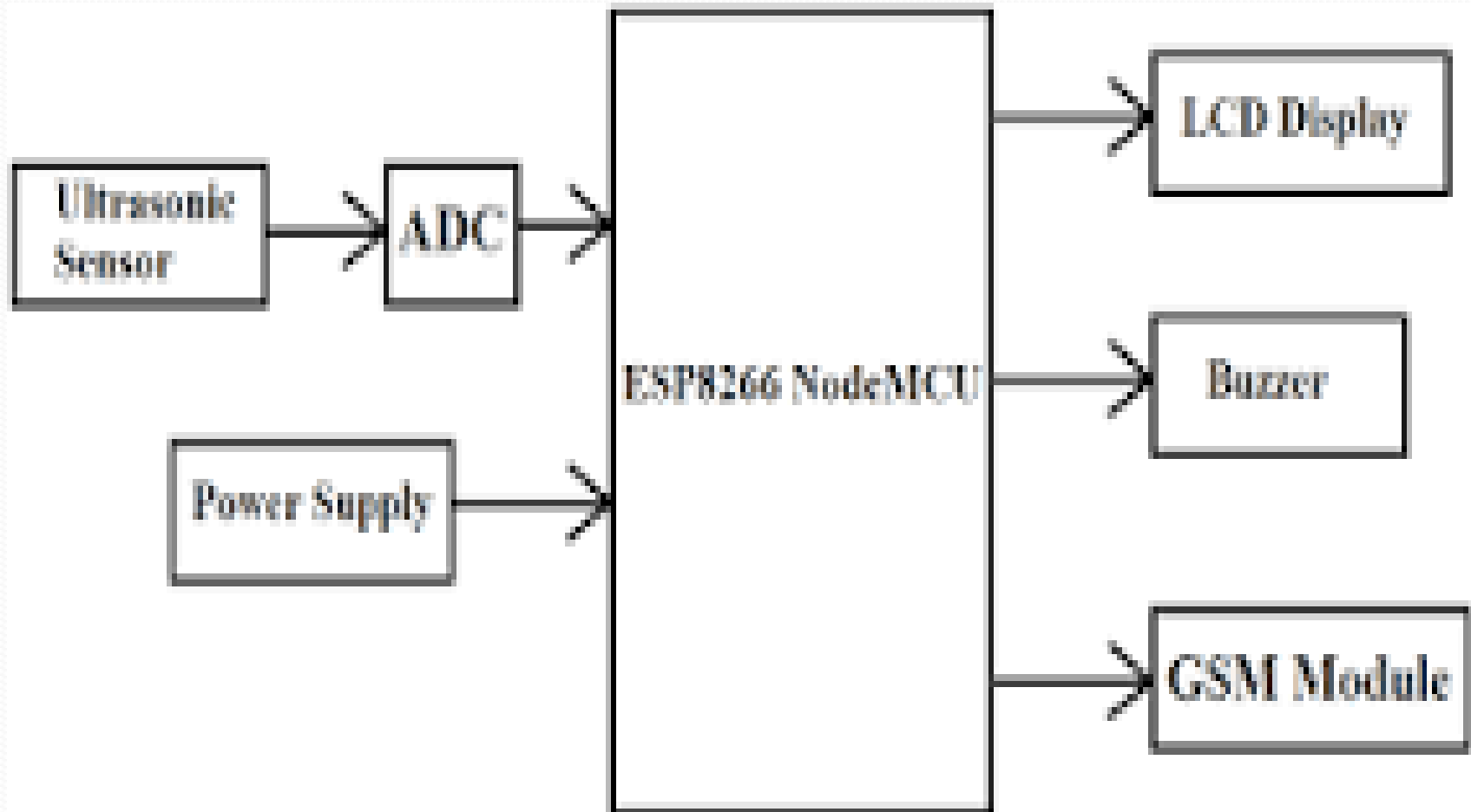


# INNOVATION:

## ❖ Petrol detecting

The petrol level is detecting in the sensor near by the petrol bunk connecting into vehicle.

# BLOCK DIAGRAM:



# BENEFITS

- Increased Visibility. ...
- Faster Delivery Times. ...
- More Accurate Delivery. ...
- Lower Costs for Gas and Maintenance.
- Getting More From What You Already Have.



# PROGRAM:

```
const int ping Pin = 7;
const int echo Pin = 6;
void setup() { Serial . begin(9600);
}
void loop()
{
    long duration, inches, cm;
    Pin Mode(ping Pin, OUTPUT);
    digital Write (ping Pin , LOW);
    Delay Microseconds(2);
    Digital Write(ping Pin, HIGH);
    delay Microseconds(10);
    digital Write(ping Pin, LOW);
    pin Mode(echo Pin, INPUT);
    duration = pulse In(echo Pin, HIGH);
```

# CONT....

```
inches = microsecondsToInches(duration);
cm = microsecondsToCentimeters(duration); Serial.print(inches);
Serial.print("in, ");
Serial.print(cm);
Serial.print("cm");
Serial.println();
delay(100);
}

long microsecondsToInches(long microseconds)
{
    return microseconds / 74 / 2;
}

long microsecondsToCentimeters(long microseconds)
{
    return microseconds / 29 / 2;
}
```



**THANK YOU!**