TrafficTelligence:Advanced Traffic Volume Estimation with Machine Learning

By

(KRISHANMURTI KUMAR)

(RAJANI MUDIMADUGU)

(SHASHI KUMAR)

(VIKASH KUMAR UPADHAYA)

Guided by

Prof. Ms Raasha

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

Feauture selection:

There is a huge disparity between the x values so let us use feature scaling.

Feature scaling is a method used to normalize the range of independent variables or features of data.

```
y = data['traffic_volume']
x = data.drop(columns=['traffic_volume'],axis=1)
```

```
names = x.columns
```

```
from sklearn.preprocessing import scale
```

```
x = scale(x)
```

```
x  = pd.DataFrame(x,columns=names)
```

```
x.head()
```

	holiday	temp	rain	snow	weather	day	month	year	hours	minutes	seconds
0	0.015856	0.530485	-0.007463	-0.027235	-0.566452	-1.574903	1.02758	-1.855294	-0.345548	0.0	0.0
1	0.015856	0.611467	-0.007463	-0.027235	-0.566452	-1.574903	1.02758	-1.855294	-0.201459	0.0	0.0
2	0.015856	0.627964	-0.007463	-0.027235	-0.566452	-1.574903	1.02758	-1.855294	-0.057371	0.0	0.0
3	0.015856	0.669205	-0.007463	-0.027235	-0.566452	-1.574903	1.02758	-1.855294	0.086718	0.0	0.0
4	0.015856	0.744939	-0.007463	-0.027235	-0.566452	-1.574903	1.02758	-1.855294	0.230807	0.0	0.0

- After scaling the data will be converted into an array form
- Loading the feature names before scaling and converting them back to data frame after standard scaling is applied.