Smart City: Traffic prediction using Deep Learning

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Introduction:

The 5th project of data science Bootcamp T5 focuses on deep learning algorithms. Traffic prediction is very important to any urban city, especially in crowded areas. Predicting traffic can be very useful for managing future traffic. Therefore, the idea proposed for this project is to use deep learning algorithms to help us predict traffic at a certain time and location. The goal of the project is to help smart cities have a better understanding of traffic patterns that lead to better management of traffic and solving many problems related to infrastructure and safety. The prediction of traffic can be implemented in smart cities in many ways that will improve human life.

Dataset:

The dataset for this project consists of date, time, vehicles, and junction information. The data are collected from sensors at every junction. It contains about 48000 observations, and it is obtained from Kaggle as an open-source, Here.

Tools:

- **Technologies:** Python, Jupyter Notebook.
- **Libraries:** pandas, Numpy, Matplot, Seaborn, Sklearn, Keras, and Tensorflow.