

DATASET DESCRIPTION:

Link to the dataset: <https://www.kaggle.com/meowmeowmeowmeowmeow/gtsrb-german-traffic-sign>

The German Traffic Sign Benchmark (GTSRB) is a multiclass, single image classification problem, presented at the International Joint Conference for Neural Networks. It has more than 40 classes according to which the real-world traffic signs are recognised and classified. The dataset contains 50,000 + images that are used to train and test data.

Work Environment: Google Colab

Programming Language: Python

Dataset: Kaggle repository

The dataset contains three folders namely Test, Train, and Meta. Meta folder contains the images of the recognised traffic signs in .png format and varying sizes. The Test folder contains the real world images of traffic signs, the Train folder is empty to which the files are appended later. It also consists of three .csv files named Test, Train, and Meta respectively. The Meta.csv file has Path, ClassID, ShapeID, ColorID, and SignID columns. The Test.csv file is composed of 8 columns that are width, height, upper left x and y coordinates, lower right x and y coordinates, ClassID, and Path. The train.csv file provides train annotations and has the same columns as that of the Test file.

The dataset is directly accessed by the code from the kaggle repository using certain commands and the kaggle.json file.

The commands used for the dataset access are as follows:

```
[ ] ! pip install kaggle
```

```
[ ] ! mkdir ~/.kaggle
```

```
[ ] ! cp kaggle.json ~/.kaggle/
```

```
[ ] ! chmod 600 ~/.kaggle/kaggle.json
```

```
! kaggle datasets download meowmeowmeowmeowmeow/gtsrb-german-traffic-sign
```

```
[ ] ! unzip gtsrb-german-traffic-sign
```