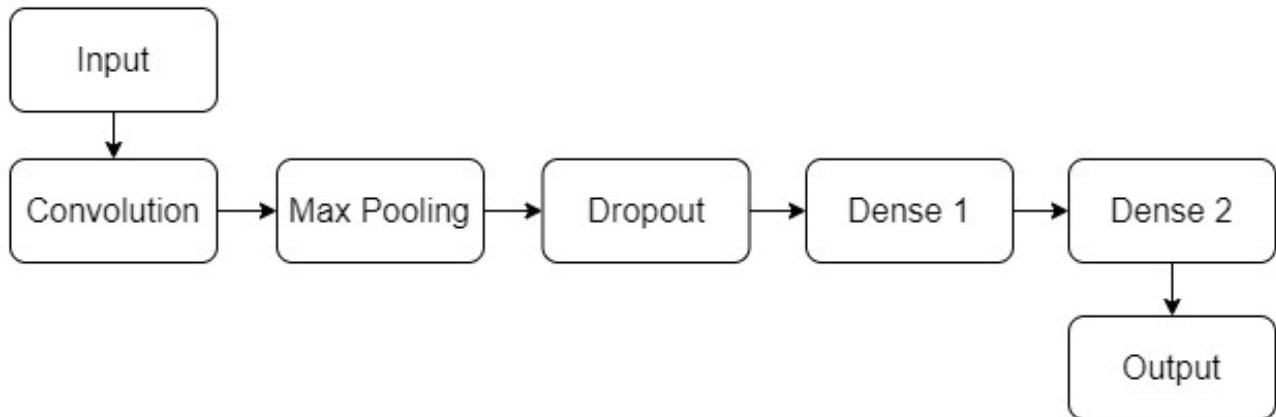


Traffic Sign Classification

Aim:

Classification of road traffic sign boards using Convolutional Neural Networks.

Architecture:



Dataset:

We are using [GTSRB](#) - German Traffic Sign Recognition Benchmark. The German Traffic Sign Benchmark is a multi-class, single-image classification challenge held at the International Joint Conference on Neural Networks (IJCNN) 2011. It contains more than 40 classes and around 50,000 images in total. [Link](#) for the dataset.

Approach:

After importing the required libraries, we will store the data and pre-process the images. Then we will load the data and labels for 80% training and 20% validation. Then we convert labels to one-hot encoding and build the model as per the above CNN architecture. The model will be compiled with "Adam" optimizer and categorical cross-entropy loss and the accuracy metrics will be observed. Finally, we do testing and classification on our test data.

Splitting of Work:

Data collection and Pre-processing : G.Deepak

Model building and Training : G.Arunteja, J.Mohith

Testing and Performance evaluation : G.Arunteja, J.Mohith, G.Deepak

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