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**NATIONAL INSTITUTE OF BUSINESS MANAGEMENT**

**School of Computing and Engineering**

**Higher Diploma in Software Engineering 222F**

Assessment-4

Machine Learning

Project Report

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**Introduction**

The model developed for road sign detection is evaluated in this report. The project involved the gain of a road signal dataset, model creation based on provided guidelines, training, testing, validating and deployment of the model.

# Dataset-The road sign dataset is a collection of images capturing various traffic signs on roadways.

**Objectives**

The objectives of this project are to design, train, and deploy a machine learning model capable of accurately classifying traffic signs. The model is intended to contribute to the improvement of intelligent transportation systems and assist in promoting road safety.

**Requirement**

Software: Google Colab

Language: Python 3.8

Modules Used: Convolution Neural Network

**Result**

Runing, Accuracy 18.1

After training the model we achieved a accuracy of around 18% This model is able to correctly classify a road sign with the above accuracy. Although this accuracy is not fit to apply for a model further optimizations can improve this model into a perfect accurate model.

Github link

<https://github.com/Thimanjila/Traffic_Sign_Object_Detection.git>

**Contribution**

COHDSE222F-027 S.N.OCKERSZ – Model creation

COHDSE222F-013 K.G.D.S.HANSAKA – Api file (curl request)

COHDSE222F-011 S.E. KOPERAHEWA –setting up docker build file

COHDSE222F-024 S.S.WIMALASIRI – GitHub repository management

COHDSE222F-021 W.M.T.D. UDANGAWE – Report creation