# Motivation

Problem Statement:

The problem we aim to address in this project is the accurate identification of street signs using a Convolutional Neural Network (CNN) model implemented with Keras. Street signs play a critical role in traffic management, providing essential information and regulations to both drivers and pedestrians. However, manual identification and interpretation of street signs can be time-consuming and error prone.

Output:

* End users: The end users of this project are individuals and organizations involved in traffic management systems, autonomous vehicle development, and road safety initiatives. These include traffic authorities, transportation departments and automotive companies in the field of computer vision and artificial intelligence.
* Goal of end users: The primary goal of the end users is to have an automated system that can accurately and efficiently identify street signs in real-time. By leveraging advanced computer vision techniques and machine learning models, the end users aim to improve traffic flow, enhance road safety, and enable more effective traffic management strategies.
* Obstacle to be solved: The main obstacle to be addressed is the complexity and variability of street signs. Street signs come in various shapes, sizes, colors, and with different symbols and text. Additionally, environmental factors such as lighting conditions, weather conditions, and occlusions can further complicate the identification process. Developing a robust CNN model capable of handling these challenges and accurately recognizing street signs is crucial to overcome this obstacle.

By developing an effective CNN model that can accurately identify street signs, we can provide a valuable tool to the end users, enabling them to make more informed decisions in traffic management, enhance road safety, and contribute to the development of intelligent transportation systems.