

Theme 18. Identification of traffic signs

Grupp 11

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1 Purpose of the project

The purpose of the project is to identify and recognize traffic signs containing the speed limit. The project will focus on the Swedish traffic signs. In the eventuality of the project scope being too small or narrow, the project can extend further to speed limit signs in other countries or identifying other sign types, e.g signs containing location names.

2 Data description

Data for the project will be extracted from Google Street View.

3 Method

The programming part of the project will be done using Python.

1. First, extract Google Street View image using APIs. Google has provided several application program interfaces (API) for developers to access its services associated with Google Maps.
2. Then, perform color segmentation. Since the traffic signs have specific color components, it will help us recognize the signs.
3. After that, perform shape classification.
4. Then, perform Region of Interest (ROI) extraction and normalization.
5. Finally, perform sign content recognition.

4 References

Traffic sign inventory from google street view images - doi:10.5194/isprsarchives-XLI-B4-243-2016