

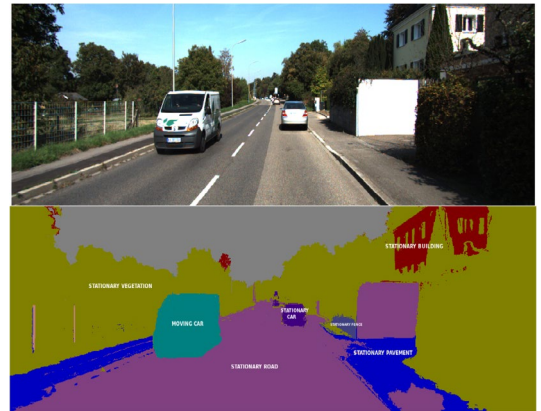
Segmentation of objects in Images/Videos

Keywords: Image analysis, Computer vision, Segmentation, Identification

Overview

In modern companies, visually impaired people (VIP) taking part in group meetings is not uncommon. However, a significant part of communication is done via nonverbal communication (NVC) such as deictic gestures (e.g. "this over there") or general body language (e.g. eye rolling, shrugging) which is commonly inaccessible to VIPs. In order to translate this NVC and thus grant VIPs a broader access to group meetings, multiple systems will be tested in various studies.

In this thesis, you will research on the segmentation of the images and videos which will give useful information from that image or video respectively. An example of segmentation of a highway is shown in the Figure.



Tasks

Your task is to research on the segmentation techniques. The focus will be on both the traditional techniques and the deep learning based techniques. The report will summarize all the pros and cons of each techniques along with detailed algorithms.

You present your work in a final presentation to the ICVR lab. Finally, you summarize and submit your views in a written report.

Workpackages

- Literature research on the state-of-the-art of image/video segmentation
- Final presentation
- Written report

Skills

- Some knowledge in image processing/computer vision
- Strong communication and interpersonal skills
- Motivation

Results

The results of this thesis need to be summarised in a written report and will be presented to the ICVR in a 20min talk.

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