Assignment Two: Semantic Segmentation [1]

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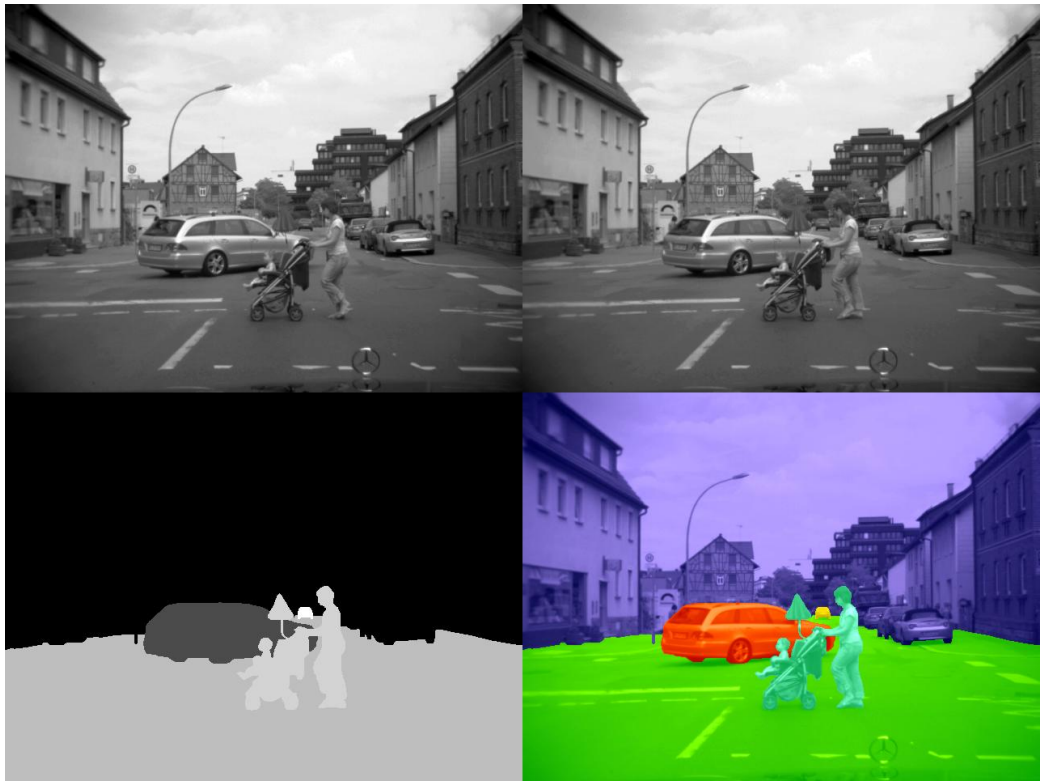
Submit a **report** about your work for this assignment by the due date (as announced in lectures). This assignment will contribute 10% towards your final marks. Solutions and results may be presented in seminars.

[1] Computer Science 775, Semester 2, 2014, Tamaki Campus

Semantic Segmentation



Example of semantic segmentation from Set 7, EISATS

This assignment requires you to work out a suggestion for a semantic segmentation method for some simple input images. You are provided a set of experimental data. Do your own research on image segmentation and find a way how to handle those data.

Task Description

- Select you input data from `ccv.wordpress.fos.auckland.ac.nz/data/stereo-pairs/`
- You are required to "cut out" the main subjects such as sky, ground, or a person.
- The given experimental data are rectified stereo pairs. Thus, you can consider using depth information (OpenCV provides several stereo matchers). This is just a suggestion - you can also decide to do your segmentation without depth information.
- Code for a mean-shift segmentation is provided on `ccv.wordpress.fos.auckland.ac.nz/data/sources/`; alternativly, you can use any other image segmentation method of your choice.
- (**Optional**) For robustness consideration (i.e. accuracy across different input data), discuss the possible use of one (constant) set of parameters for all your selected input data.

Your Submission

To finalize your report,

- start with identifying yourself and provide a title for your report,
- describe your research on about 2-3 pages,
- include samples of outputs of your program into this report on 1-2 additional pages, have 2-10 references included,
- do not copy from somewhere without proper citation and reference, but aim at writing in your own words;
- finally submit (together with your sources) your report in PDF format (6 pages at most), all in one zip file.