The detection of visual saliency in images is a huge challenge within the computer vision research. The basic concept is based on the idea that not all parts of an image are of equal importance for a specific task. Certain regions might contain more information about the image content as others.

The goal of this thesis is to implement and evaluate a software system that is able to compute the visual saliency of image regions automatically, robustly, and fast. The output of this system is a pixel-wise saliency map in a suitable format, that enables an easy usage for subsequent analysis tasks (e.g. object detection, image categorization).

Keywords: Visual saliency, salient regions

Involved tasks:
– Literature research
– Implementation of a visual saliency operator
– Evaluation of the whole framework

(Recommended) requirements:
– Good knowledge about image processing (e.g. attendance in Digital Image Processing)
– Basic knowledge about image analysis (e.g. attendance in Automatic Image Analysis)
– Good programming skills (e.g. C/C++)

Language: German / English