Master Thesis: Complexity Reduction of Template Matching in Video Coding

Description

Template matching is an established method in video coding and has its application in different areas. One problem of template matching, however, is its complexity. Reference picture padding is the padding of a reference picture that is used for inter prediction. At the institute currently reference picture padding methods based on template matching are investigated. To make the methods practically applicable, the complexity needs to be kept very low.

Aim of the thesis is to reduce complexity of a template matching based approach without sacrificing to much of the quality.

The following tasks need to be done:
- literature research
- development of different approaches
- implementation and evaluation

You should bring the following skills:
- communication skills
- programming skills
- analytic thinking

If you are interested contact me via email: Nicolas.Horst@fbw.rwth-aachen.de