A software tool recently developed at the CV&RS group of TU-Berlin, allows to create general processing chains for image processing and analysis in a very modular manner. A graphical user interface enables the user to select and control the individual building blocks of the pipeline and connect them visually to a graph structure. At its current state the framework is fully functional but allows only basic image operations.

The goal of this thesis is to extend the given framework with more modules to allow more complex tasks to be solved. In particular methods for input-output, visualization, machine learning, and image processing should be added.

Keywords: Image processing, graphical user interface

Involved tasks:
– Literature research
– Getting acquainted with the existing framework
– Extending and improving the existing framework

(Recommended) requirements:
– Basic knowledge about digital image processing (e.g. attendance in lecture DIP)
– Good programming skills (e.g. C++)

Language: German / English