

The aim of the thesis is to create a library that will provide ease way to creating and experimenting with computing networks. The concept of computing network can be explained as algorithms which can be divided into small simple parts (nodes). The main focus of this library is to easily experiment with transformations based on lifting. There are inverse operations for these connections, which are used for lossless compression of data or signal. Emphasis was put on the simplicity of creating new nodes and subsequent connections. An integral part of the work is also an example of several transformations based on lifting.