Ray tracing is a popular method for generating realistic imagery, with high computation complexity and high potential for parallelization.
Modern GPUs can be used as a high performance parallel co-processor, making them seemingly ideal for tasks such as ray tracing.

This thesis will give an overview of ray tracing methods, overview of GPU computing methods, and present a piece of software designed for using GPU for ray tracing.
This software tries to integrate classic ray tracing algorithms with specifics of GPU programming, while providing extendability and high performance.