Abstract:
The aim of this thesis is to find the optimal control of Markov chain with discounted evaluation of transitions in discrete and also in continuous time. We present Howard's iterative algorithm, the algorithm for finding the optimal control. Then the strategy is applied to the problem of optimal trading, where the goal is to maximize market price of the portfolio in infinite time horizont, given the existence of the proportional transaction costs. Market price is simulated with Brownian motion.