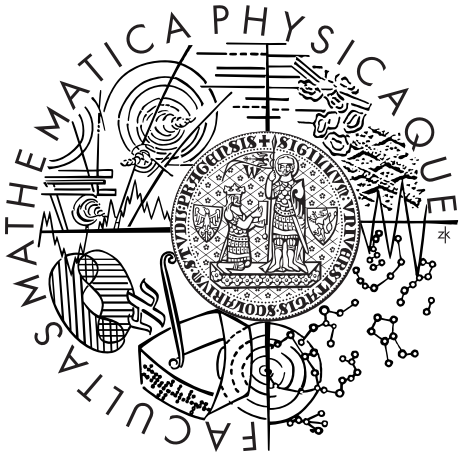
Charles University in Prague
Faculty of Mathematics and Physics

MASTER THESIS



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Distributed Monte-Carlo Tree Search for Games with Team of Cooperative Agents

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Study programme: Theoretical Computer Science

Specialization: Neprocedural Programming and Artifitial I

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Abstrakt:

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Introduction

1. Monte-Carlo Tree Search

This chapter describes Monte-Carlo Tree Search (referred as MCTS (!)) algorithm and discusses its properties. The algorithm serves for searching wolrd states in fully visible environment using incrementally growing state tree and stochastic simulations for evaluation of states.

1.1 Brief history

1.2 Description

1.3 Upper-Confidence Bound

2. Distributed Approach to MCTS

2.1 Motivation and Related Work

2.2 Name of Algorithm 1

2.3 Name of Algorithm 2

2.4 Name of Algorithm 3

3. Evaluation of Distributed MCTS Algorithms

3.1 Ms.Pacman vs Ghosts Framework

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