

The evolution of the movement of virtual creatures is an interesting application of evolutionary algorithms in the field of Artificial Life. The goal of this thesis was to explore the possibilities of its use in computer games.

As part of this thesis I proposed a game with the theme of evolution of the movement of virtual creatures, I created a system for their evolution based on information from existing works and expanded it with the features needed for the proposed game.

In the course of the work, it turned out that the evolution is too computationally demanding to use in the game. Therefore, I created a simplified game prototype and in my work I focused more on experimenting with various settings of the algorithms for the evolution of virtual creatures.