

Robotic swarms are often used for solving different tasks. Many articles are focused on generating robot controllers for swarm behaviour using evolutionary algorithms. Most of them are nevertheless considering only homogenous robots. The goal of this thesis is to use evolutionary algorithms for behaviours of heterogeneous robotic swarms. A 2D simulation was implemented to explore swarm controller optimization methods with the ability to create custom scenarios for robotic swarms. We tested differential evolution and evolution strategies on three different scenarios.