Project proposal

The aim of this project is to virtually evolve soft-bodied robots that can be physically produced.

The soft robots will be modelled using voxels (three dimensional pixels). Voxel behaviour will be described in three dimensions and optimised for computing efficiency. These voxels will then be combined in larger numbers and their behaviours observed.

The voxels will then be evolved using a genetic algorithm. An initial random population of combinations of the voxels will be generated and evolved towards a specific goal. The outer surface of the bodies will be smoothed