



LifeNEAT - A virtual life simulator made in Unity3D

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ABSTRACT

Many artificial life and AI simulators are inaccessible to general computer users. Often this is because they are too difficult to install and use. The aim with this project was to create a simple program that introduces genetic algorithms and artificial life simulators to potential future computer scientists. The Resulting program, LifeNEAT, is an implementation of Daniel Jallo's UnityNEAT, a port of NeuroEvolution of Augmenting Topologies (NEAT) to Unity3D. Due to using Unity engine the application is easy to install and can be built for different target platforms including web browsers and mobile. Users have the choice of three self contained experiments, two of which allow the user direct control over the environment that creatures evolve in and another where a body and suitable brain controller to operate it is evolved.

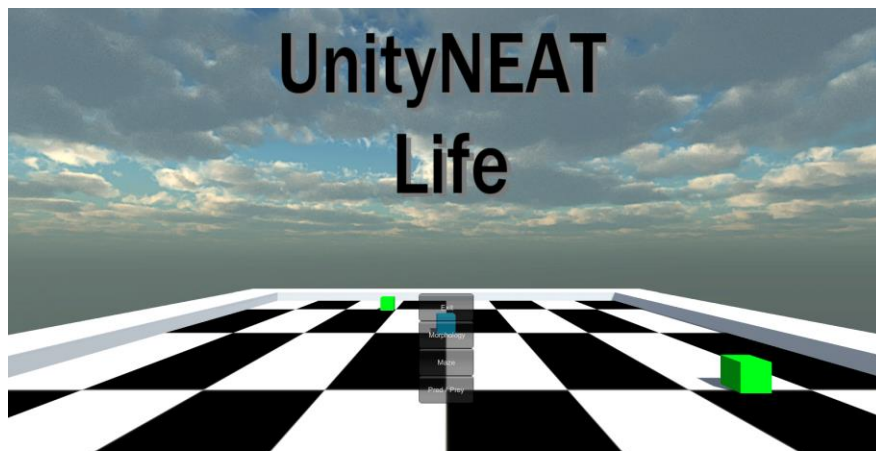


Figure 1. Title Screen



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0945, LifeNEAT - A virtual life simulator made in Unity3D, *Proc. 13th School Conf. for Annual Research Projects*, V F Ruiz (Ed), pp. xx-yy, University of Reading, 3rd June 2014.