EVOLUTIONARY TASK FORCE

SUMMARY OF WEEK 6 (5 – 12 DEC)

In week 6 we almost reached milestone: Jean-Marc put “everything” together and started the first simulations with evolution in Robo3D. However, the simulator isn't yet stable enough to perform a complete evolutionary run. In all (5) runs he tried the system gave an error from ode. From the log and visual analysis it seems that problems occur when the controllers ask for too extreme angles to the hinges of the robots. The code he used is available at:
https://code.launchpad.net/~montanier-jeanmarc/+junk/evoDemo

During the weekly skype meeting we agreed to hold a physical meeting of the task force in Stuttgart on January 11, 2012. It will be a one day meeting and start around 9 am. In addition, Florian will be available for Hardware/Software Workshops before and after this meeting (9-10 Jan, and 12 Jan).

We added sections for the subtasks on the SEC Blog as agreed. Each subtask-force can use them for documenting the progress and the internal agreements. Feel encouraged to consult them for more information, beyond this summary.

Berend volunteered to coordinate a joint effort of the subtask forces to produce a common document that specifies the experimental details (in the simulator). This will elevate the agreements made per subtask-force to a higher level and lead to a well-structured and clearly written document that is easy to locate and consult for all of us. We did not agree to a specific deadline, but it would be nice to have this BEFORE the Christmas holiday. (Thus enabling running tests during the holiday period.)

I have the impression that subtask-forces 1 and 2 lost impetus. At least, the spokespersons were not present during the weekly skype meeting, I have not received the usual email summary by Monday morning, and the Blog sections are not filled with fresh information. Maybe they are just working too hard, having no time to report…

Subtask-force 3 (internal rewards)
Finalised testing QI vs Distance as internal reward function in Webots; although a distance-based internal reward significantly outperforms QI, QI does seem to provide a viable alternative to distance. Distance seems to result in a more twisty path. Further testing in robo3d (courtesy of Jean-Marc).

Subtask-force 4 (simulator)
The priority was and is to help task-force members with Robo3D problems. In particular, Vojta is trying to help Jean-Marc with the errors of the evolutionary runs. Reminder: the tutorial is on the SEC Blog page.

For further details please consult the SEC Blog: https://symbrion-ec.wikidot.com/