CSC 2521 Computer Graphics, Fall 2008: Assignment 3

Due December 5, midnight.

Your assignment is to implement a 2D walking biped in a physical simulator. The biped should have two legs and knees, feet, and a torso (i.e., 6 joints and 2 positional DOFs, or 8 DOFs total). You may make a more detailed walker if you wish (e.g., 3D, arms, etc.). The walker should be able to stay moving at a reasonable pace for at least 4 steps without falling. Provide your solution as a movie (screen-grab) or Java applet. (You may also show it to me in person as a live demo, but note that I am out of town starting December 4.)

It is recommended that you study the SIMBICON paper; you may wish to simply implement that paper. See the paper's webpage for a sample demo.

You may implement your demo in whatever environment you wish, including using an existing physics engine such as ODE. Starter code for the assignment can be found on the course webpage; you will also need ODE: `http://www.ode.org/download.html`. You should implement the walker itself on your own; do not use code/data from the web for this (other than numbers from the SIMBICON paper).