Bowler Studio

A robot development application that combines CAD, Scripting, and powerful libraries.

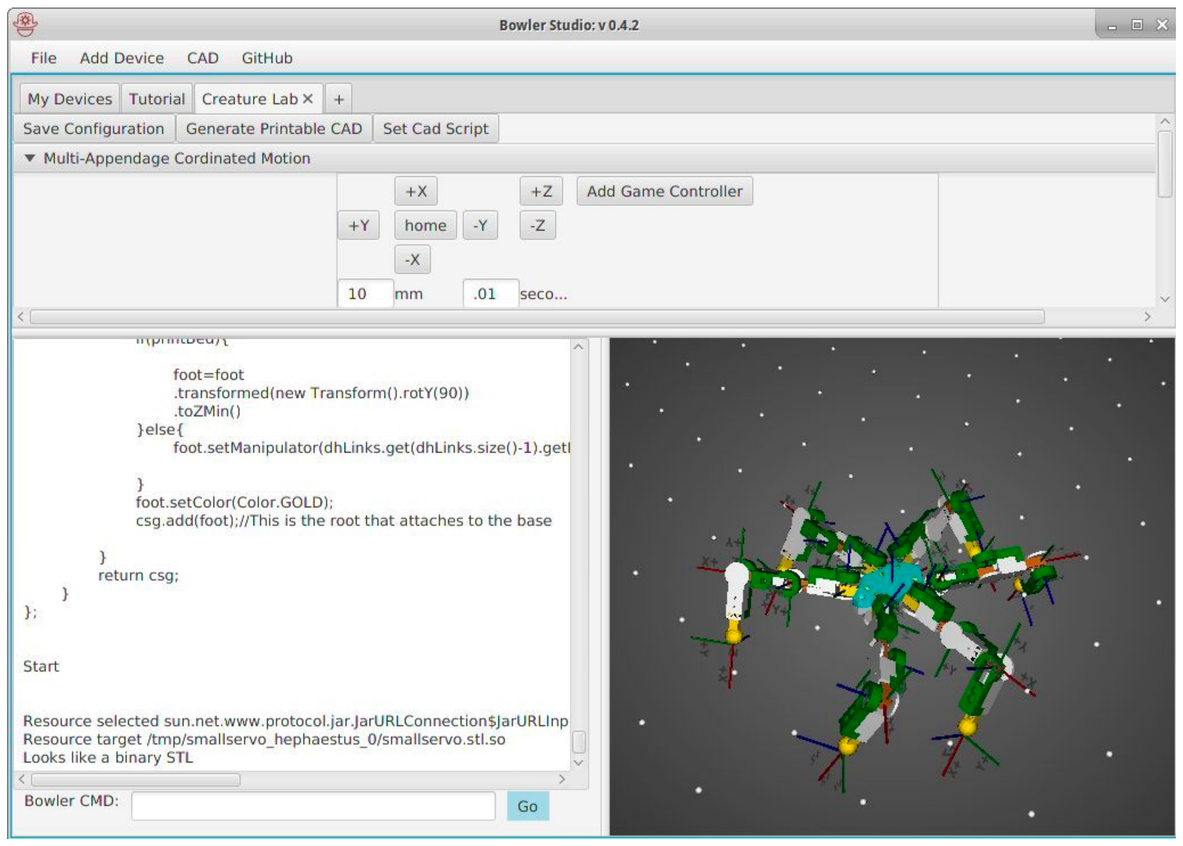
A Full Robotics Stack

BowlerStudio brings the full power of The OpenCV image processing library, a Configurable kinematics engine based on D-H parameters, A Fully Featured JCSG based Cad and 3d Modeling engine, and a Built in WebKit browser capable of viewing documentation and executing code directly from Github Gists**.**

Scripts can be loaded from the Local File System and edited using a editor of your choice or loaded from Github gists for a truly "backed up in the cloud" coding experience.

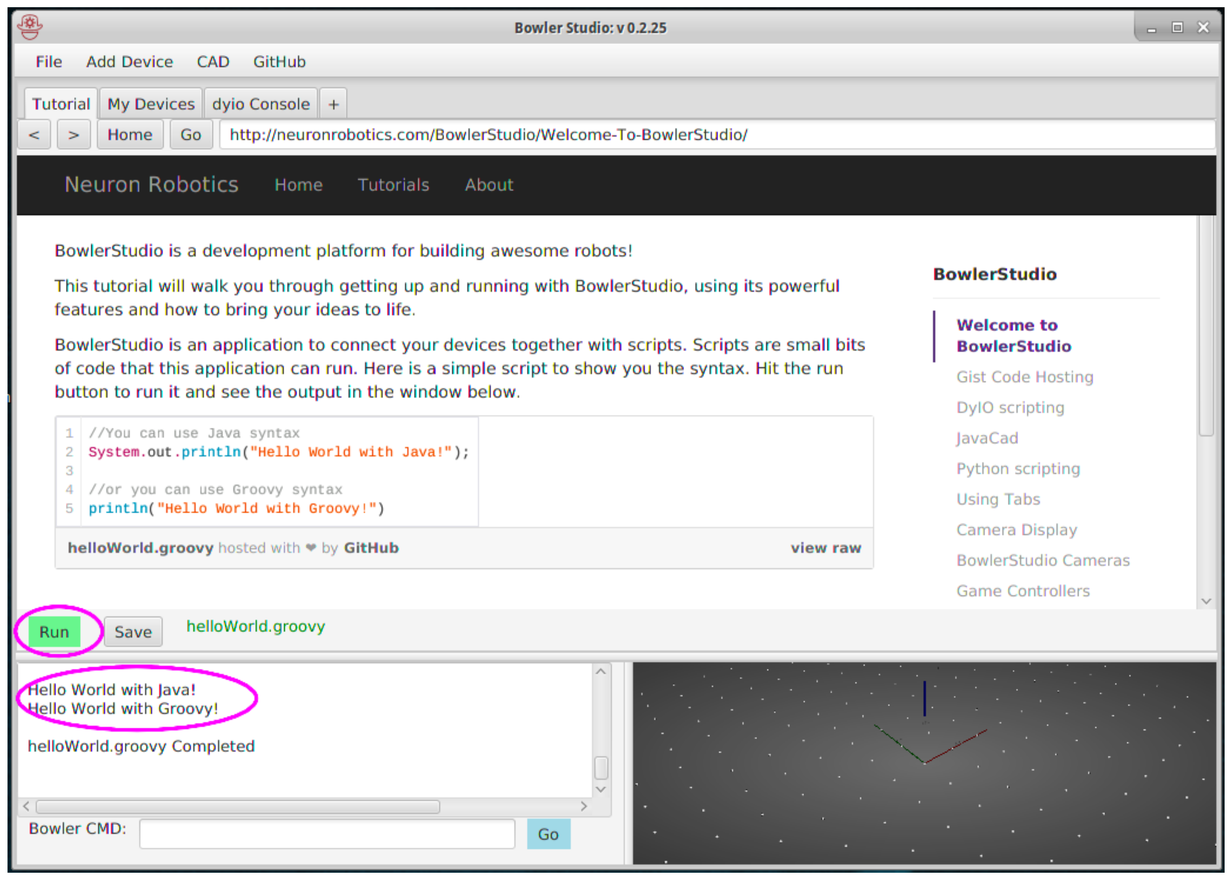
BowlerStudio features the Creature Creator, a design interface that lets users generate robots with slide bars. Bowler Studio takes this data and runs it through a CAD Script to generate the 3d-Visualization and printable STLs while also using it's built in kinematics engine to teach the robot how to walk.

The Virtual Robot can then be linked to Real hardware and sensors using the DyIO (Dynamic IO module) allpwing your code and scripts to control a physical 3D-Printed Robot.



Open Hardware, Open Software

Bowlerstudio is compleatly open source released under a BSD license on our github page.
https://github.com/NeuronRobotics/BowlerStudio/



Run java, Groovy, Clojure, and Python scripts from files or from gists

Generate a Controlable robot from DH-Parameters, Make STLs from the model, and Print them

Use the DyIO ro bridge the virtual and physical worlds and make your robot walk.