

WebGL & The Grasping Interface

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WebGL

- Provides hardware accelerated 3D rendering in the web browser
- Developed and managed by Khronos Group
- Based on OpenGL ES 2.0
- Applications written with JavaScript
- Supported in Chrome, Firefox 4
- Many frameworks exist already

Three.js

- 3D JavaScript engine, using WebGL
- Simple to use
- Built in lighting, primitive objects, shaders
- Allows Scene hierarchy
- Allows object parent/child relationships
- <https://github.com/mrdoob/three.js/>

Three.js Demonstrations

- Revolving Box
- Planetary System
- Bouncing Balls

Grasping Interface

- grasp.robotics.cs.rpi.edu
- Provides access to all data in Experiments database
- Provides a 3D visualization of the experiments
- Planning to add graphs of certain data

