Tutorial Overview

Goals

The aim of this two-hour tutorial is to answer several key questions:

- 1. As a Warrior Web technology developer, what can you do with OpenSim?
- 2. Why should you use OpenSim in the process of developing and testing your devices?
- 3. Where can you find more information after this tutorial?

Agenda

We will answer these questions through a few specific, illustrative examples:

- 1. *A case study* demonstrating how OpenSim has been used to model and evaluate a hip assist device to reduce the metabolic cost of running.
- 2. A hands on exercise using OpenSim to investigate drop landings and ankle inversion with and without an ankle assistive device.

Following these examples, we will hold a feedback session to get your input on what devices you'd like to model, what new features will be most important to you, and the biggest benefits and potential challenges you see for adopting OpenSim.

We will close out the tutorial with a summary of the material covered and an overview of available OpenSim support and resources.

Handout Contents

This handout is composed of two main sections. We have provided this printed version for your reference during the tutorial. The online versions, containing all web links can be found at the addresses listed.

- 1. An Introduction to OpenSim for the Warrior Web (http://bit.ly/RRe21V)
- 2. Step by Step Guide to the Hands On Drop Landing Exercise (http://bit.ly/NXE1Qu)

Key Web Links

There are a few key websites that you will interact with as a Warrior Web team using OpenSim:

- 1. http://opensim.stanford.edu/support/index.html This is the main, searchable OpenSim online support page and resource portal.
- 2. http://www.simtk.org/home/opensim This Simtk.org project page hosts the core OpenSim project page, including software downloads and source code. Simtk.org is a repository for hosting simulation models, data, and software.
- 3. http://www.simtk.org/home/opensim_ww The OpenSim Warrior Web project page on Simtk.org will host Warrior Web specific models, software, plugins, and other resources and links.