CMBBE Tutorial 2015

OpenSim for Muscle-Driven Multibody Dynamics and Control: Overview and Hands On Example

This hands-on tutorial at the 2015 Computer Methods in Biomechanics and Biomedical Engineering (CMBBE) meeting will provide an example for using forward dynamics, contact modeling and muscle reflexes to perform analyses of injury mechanics.

OpenSim

CMBBE Workshop, Thursday, September 3rd

OpenSim is a powerful and freely available tool for modeling and simulation of movement. Users can visualize, design, and customize musculoskeletal models and create subject-specific dynamic simulations of movement.

Workshop Program

Opensim Overview

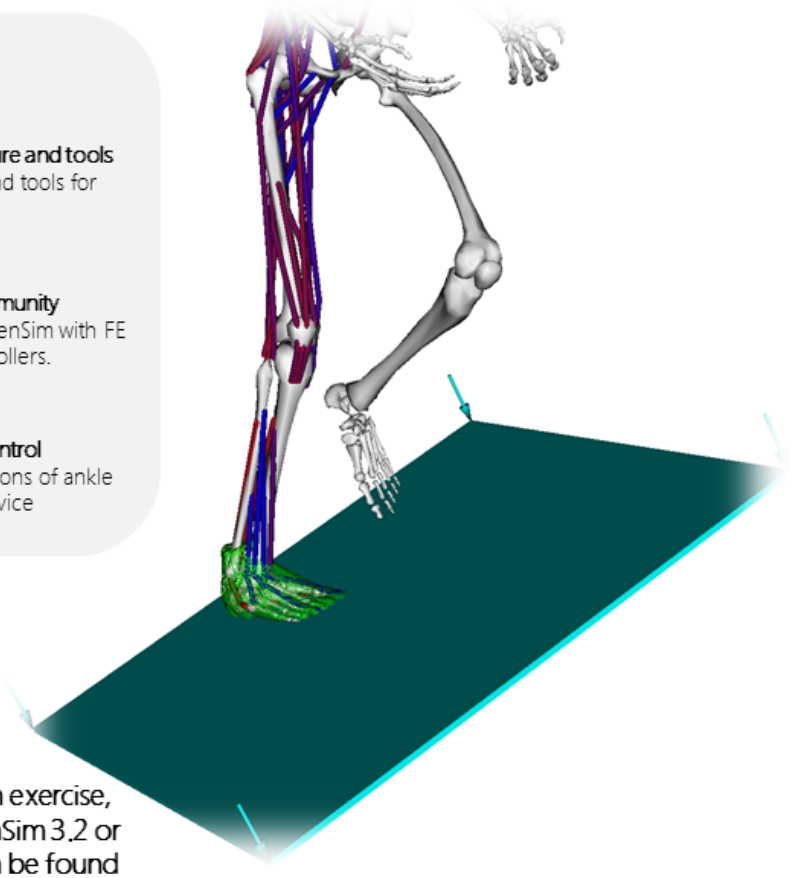
Introduction to OpenSim's structure and tools
Highlights of OpenSim features and tools for accelerating your research.

Latest Research

OpenSim applications in the community
Innovative models, combining OpenSim with FE analysis, and new predictive controllers.

Hands-On Tutorial

Muscle-Driven Dynamics and Control
Use OpenSim to perform simulations of ankle injury and design a protective device



Time, Locations & Details

Thursday, Sep 3rd, 2015
3:25pm - 5:30pm
Soprano C

To complete the hands on exercise, bring a Laptop with OpenSim 3.2 or 3.3 installed. Software can be found at opensim.stanford.edu

For further details, visit CMBBE2015.com/opensim

University of Saskatchewan CMBBE Stanford University

Workshop preparation

This is intended to be a an introduction to OpenSim. To complete the hands on exercise, bring a PC laptop with OpenSim 3.2 or 3.3 installed (download her
) and familiarize yourself with the OpenSim Graphical User Interface (GUI). Attendance is limited, so reserve your seat by signing up for CMBBE here: http:/
/cmbbe2015.com/registration/.

For any questions, contact James Dunne at james.dunne@stanford.edu.

Workshop Exercise

The hands on exercise will follow the Simulation-Based Design to Prevent Ankle Injuries tutorial. A pdf version of the tutorial can be found here.