

## **IMPLEMENTED MODIFICATIONS**

The model of Arnold et al. (2010) has been modified in the following way:

- 1) Only muscles crossing the hip joint were retained in the model.
- 2) Range of motion was limited based on normal walking joint angles taken from Kadaba et al. (1990)

The original model of Arnold et al. (2010) is available at

<https://simtk.org/home/lowlimbmodel09>.

## **REFERENCES**

Arnold, E., Ward, S., Lieber, R. and Delp, S., 2010. A Model of the Lower Limb for Analysis of Human Movement. *Annals of biomedical engineering* 38, 269-279.

Kadaba, M. P., Ramakrishnan, H. K. and Wootten, M. E., 1990. Measurement of lower extremity kinematics during level walking. *Journal of Orthopaedic Research* 8, 383-392.