

# Locomotion Control for Many-Muscle Humanoids

## *Supplemental Material*

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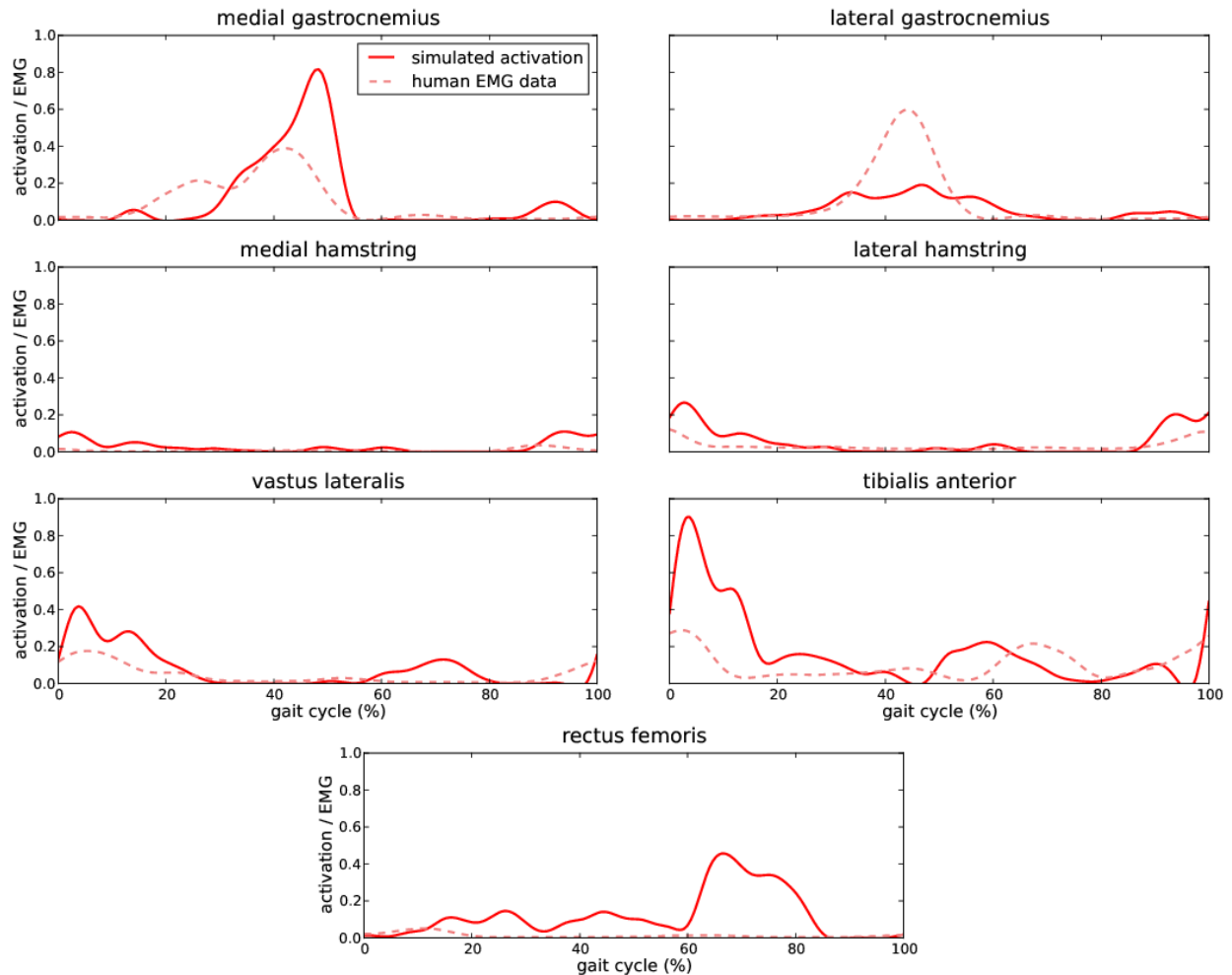


Figure 1: Comparison of simulated activations of our *normal walk* controller for the *gait2592* model and human EMG data reported by Demircan et al. [1]. The EMG data for medial and lateral hamstring are compared with simulated activations of *semitendinosus* and *biceps femoris long head*, respectively.

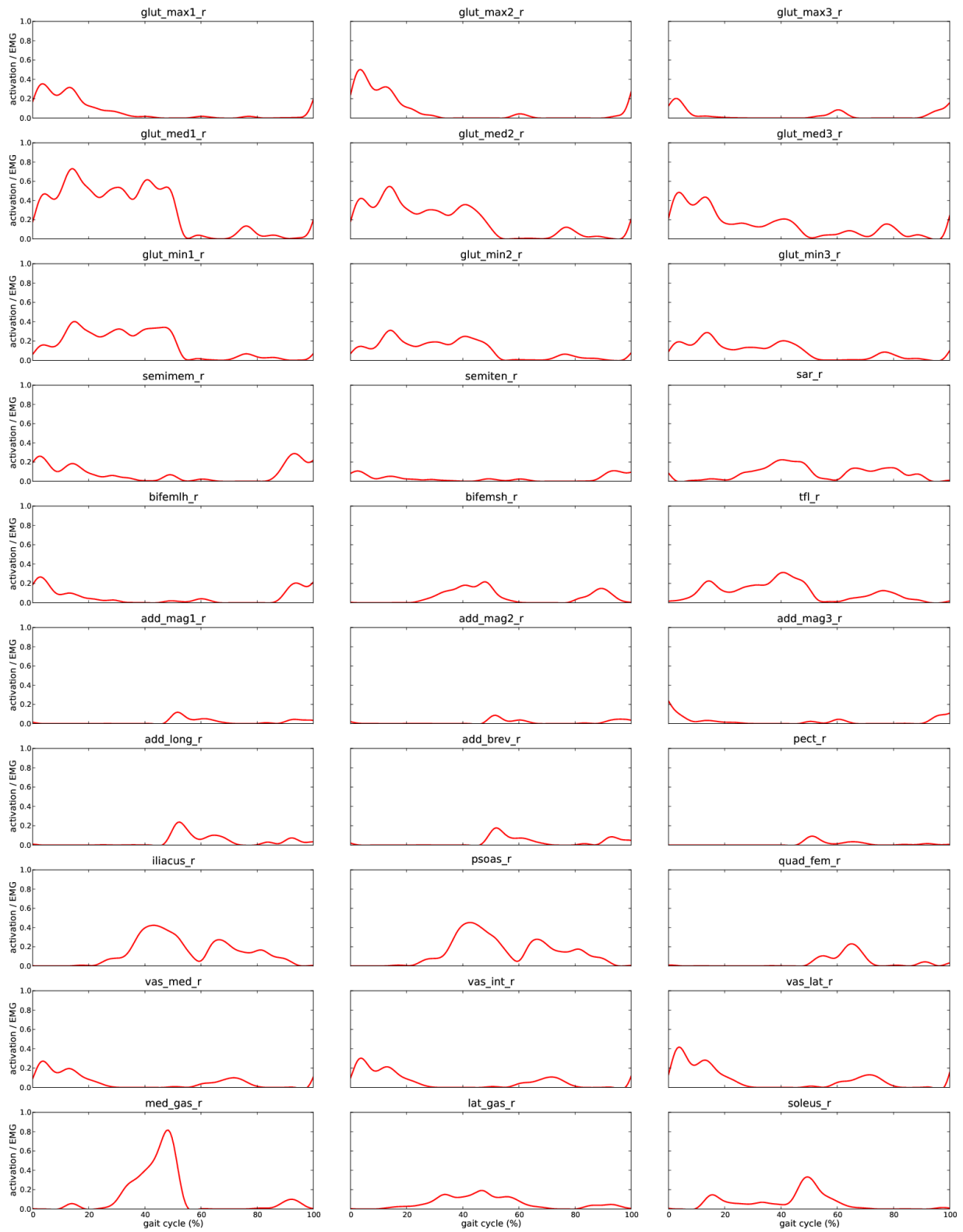


Figure 2: Simulated activations of right side muscles of the *gait2592* model for our *normal walk* controller. The gait cycle begins at right heel strike and ends at the next right heel strike.

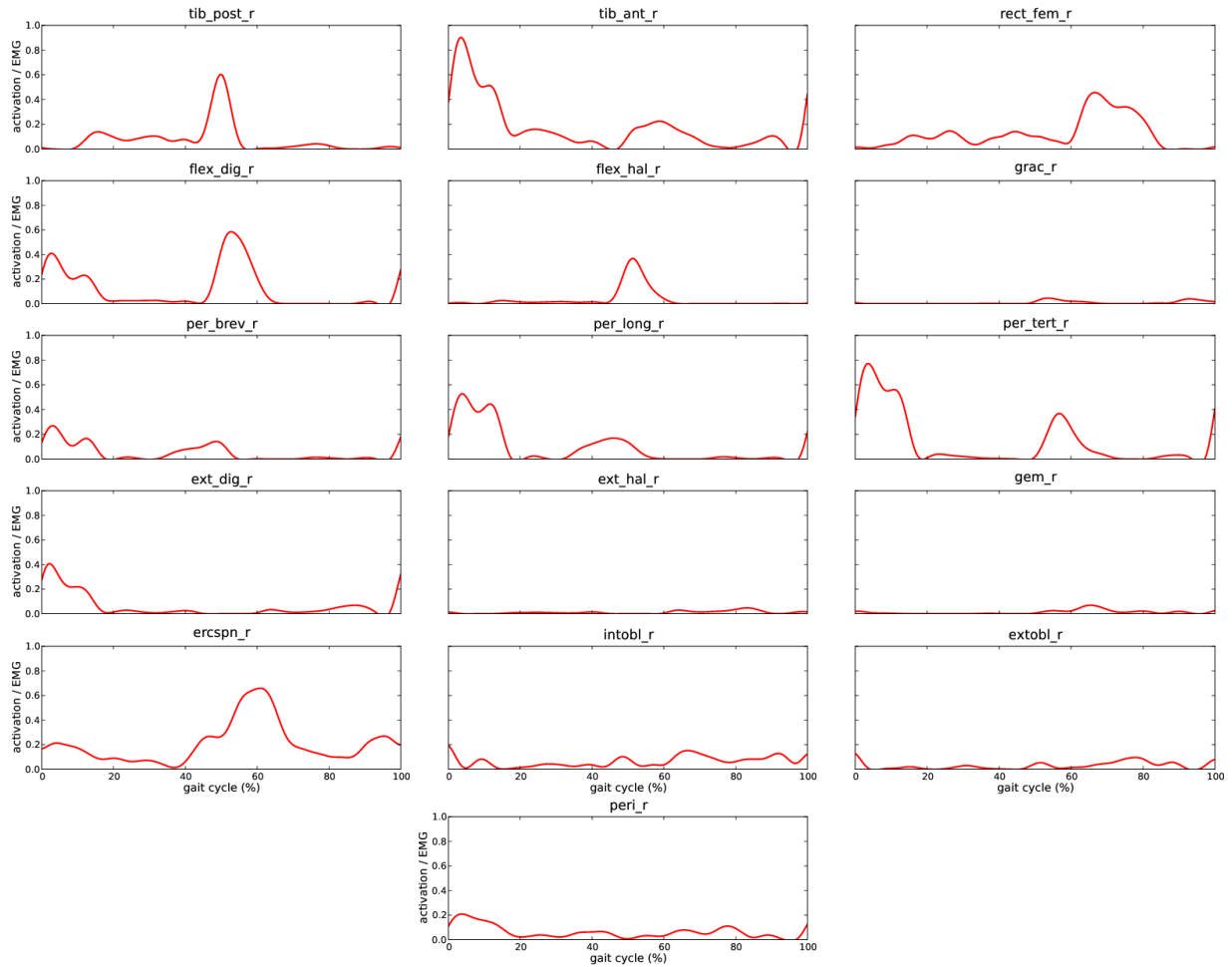


Figure 3: Simulated activations (continued from Figure 2).

## References

- [1] E. Demircan, O. Khatib, J. Wheeler, and S. Delp. Reconstruction and EMG-informed control, simulation and analysis of human movement for athletics: Performance improvement and injury prevention. In *Proc. IEEE Engineering in Medicine and Biology Society*, pages 6534–6537, 2009.