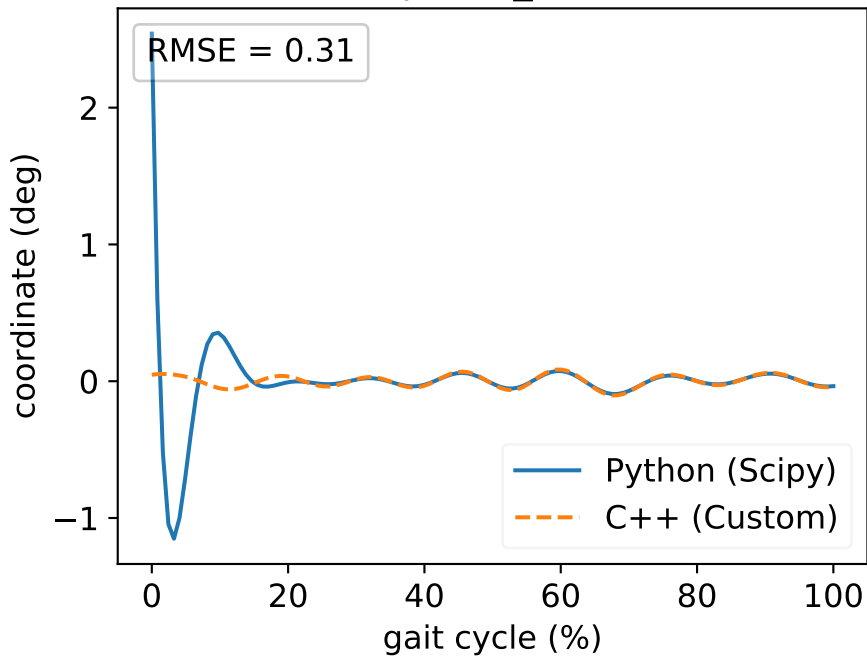
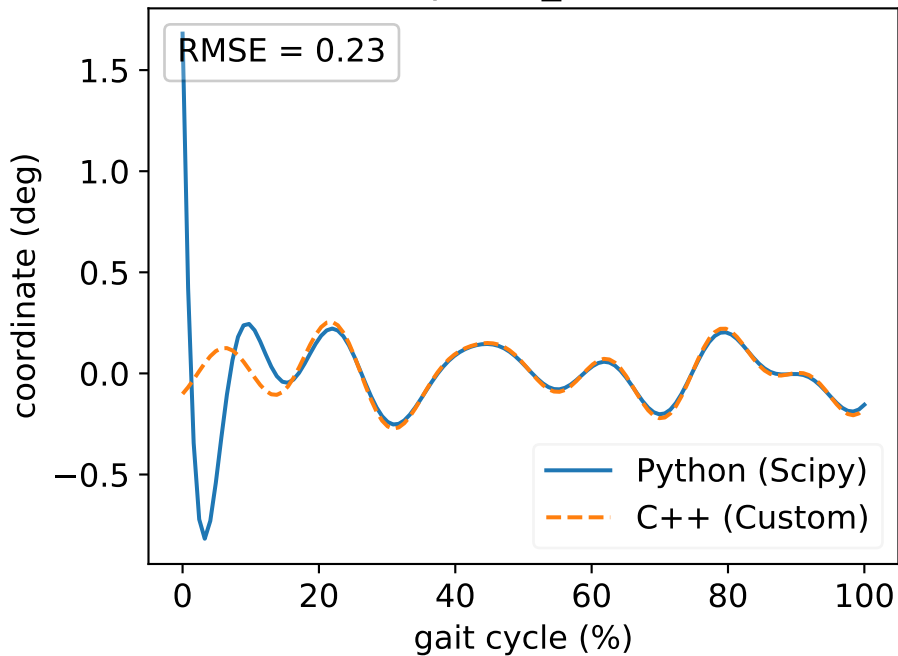


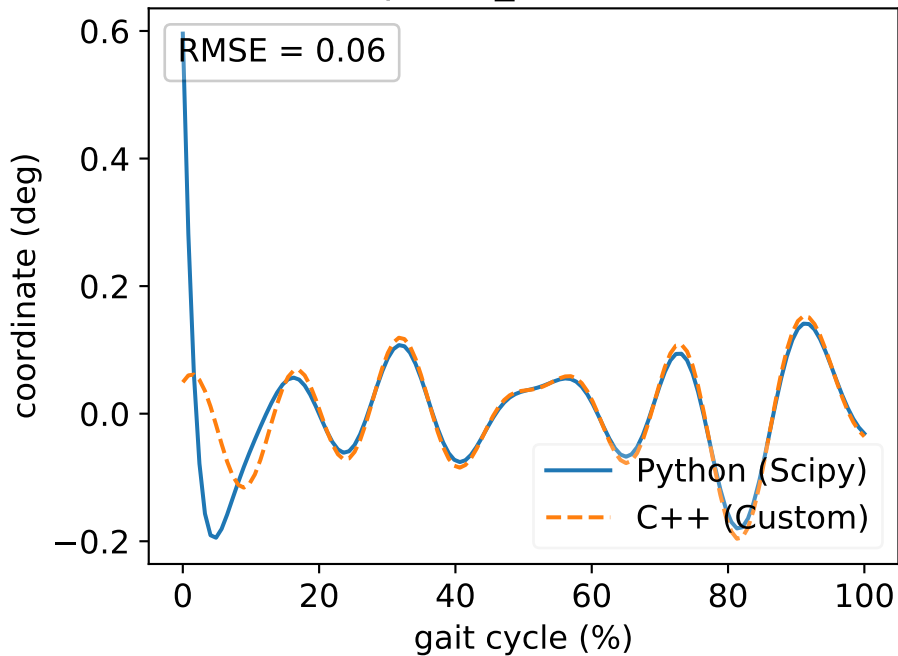
## pelvis\_tilt



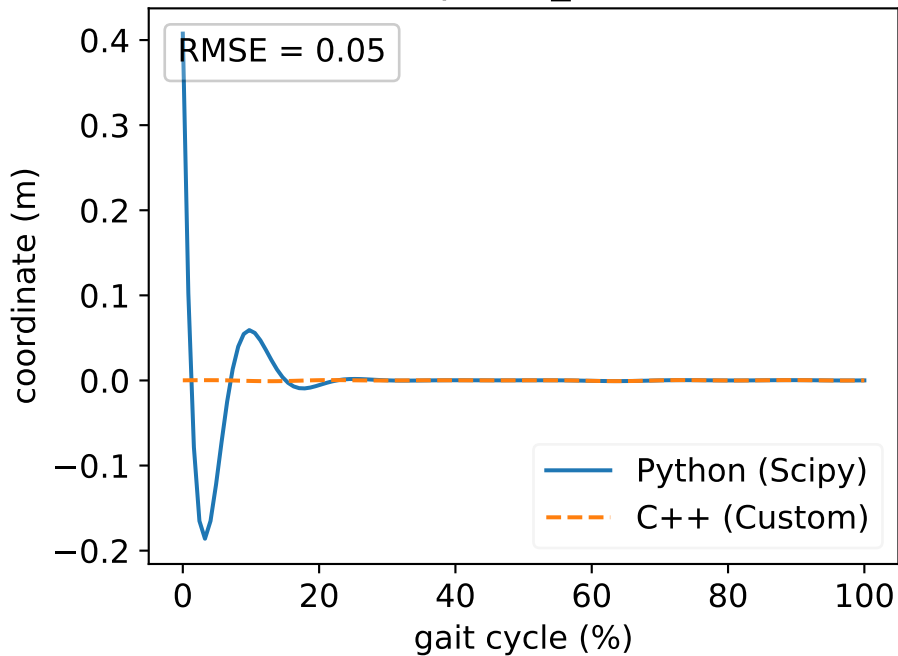
## pelvis\_list



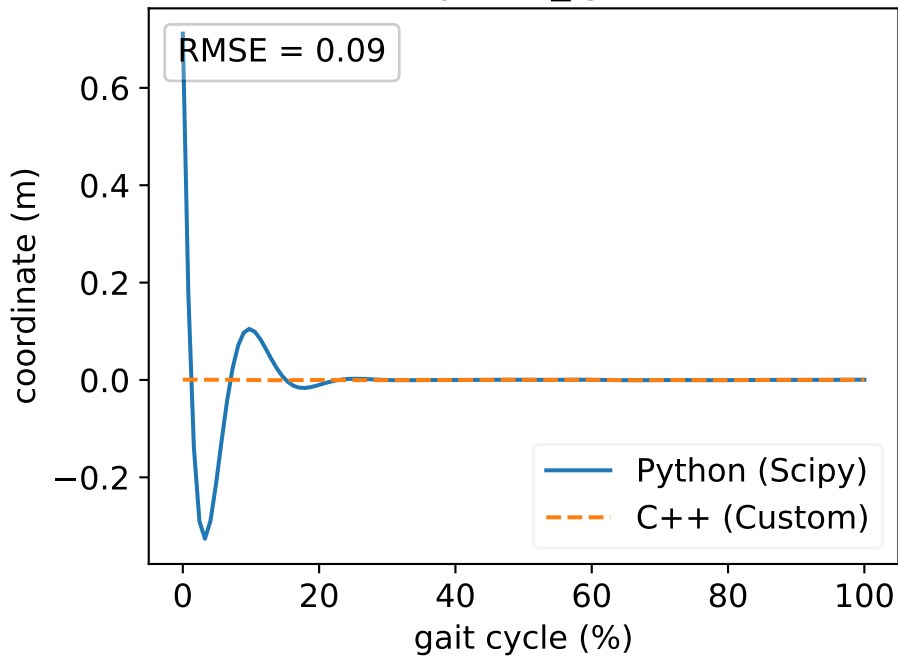
## pelvis\_rotation



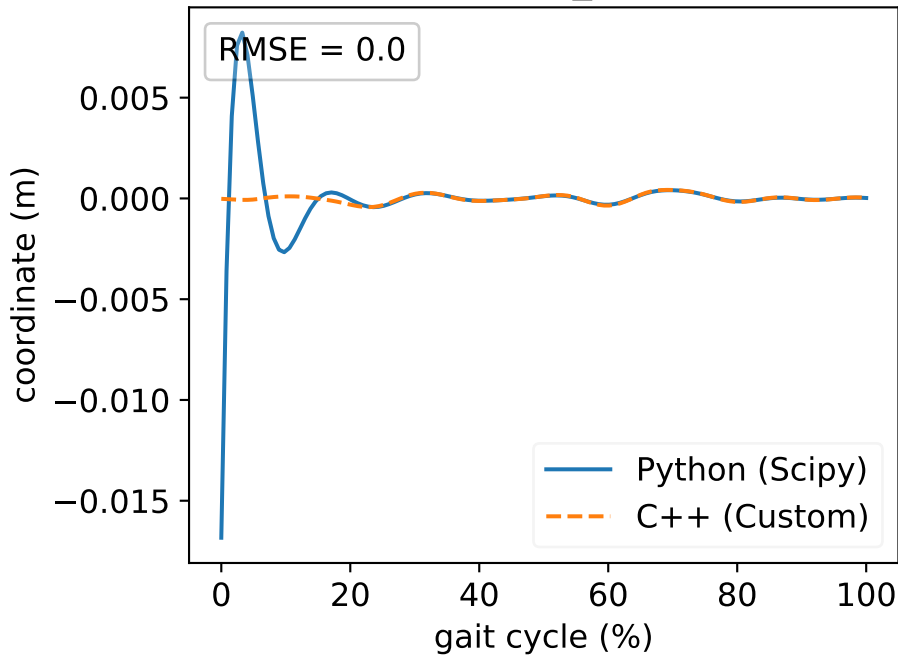
# pelvis\_tx



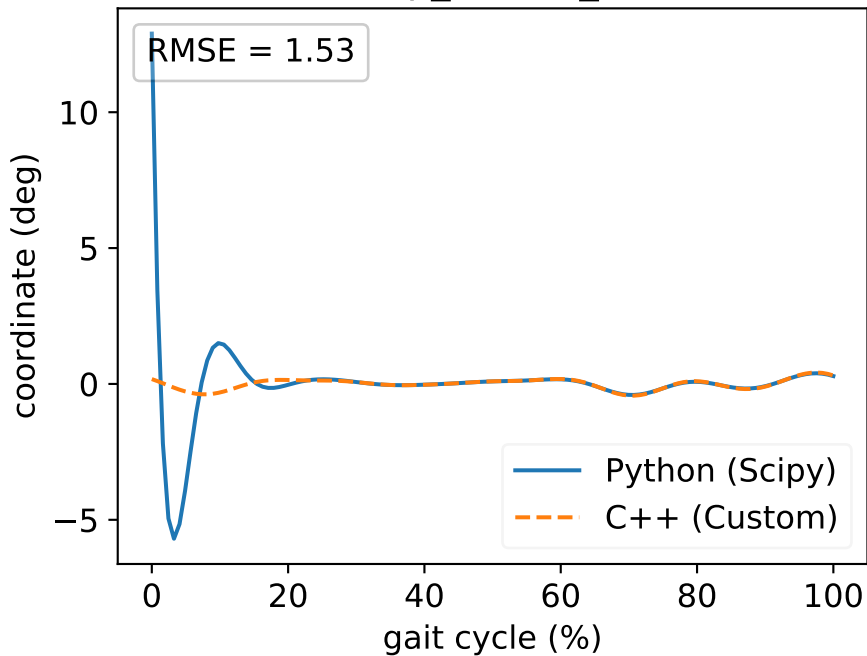
# pelvis\_ty



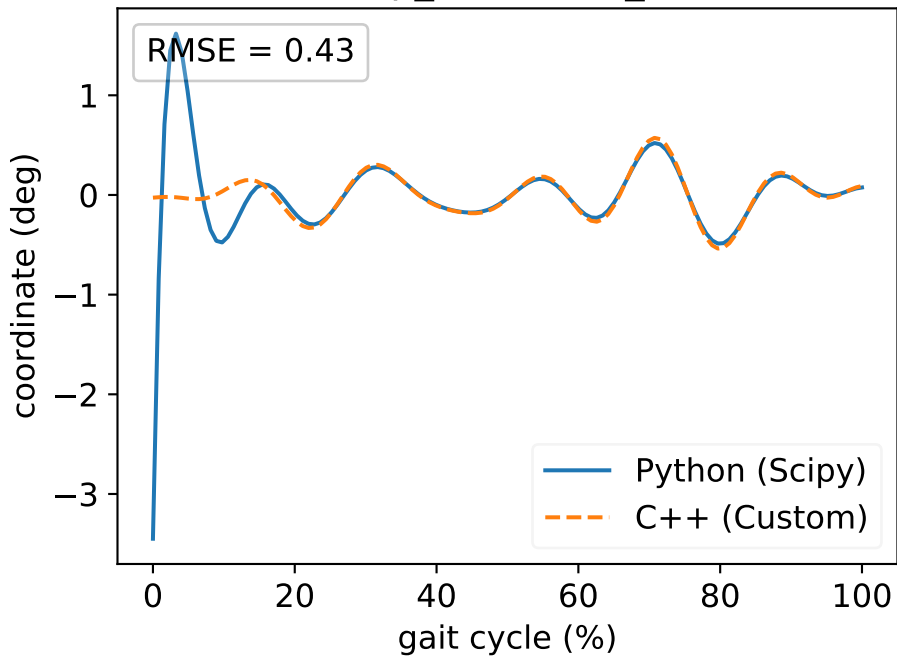
## pelvis\_tz



## hip\_flexion\_r

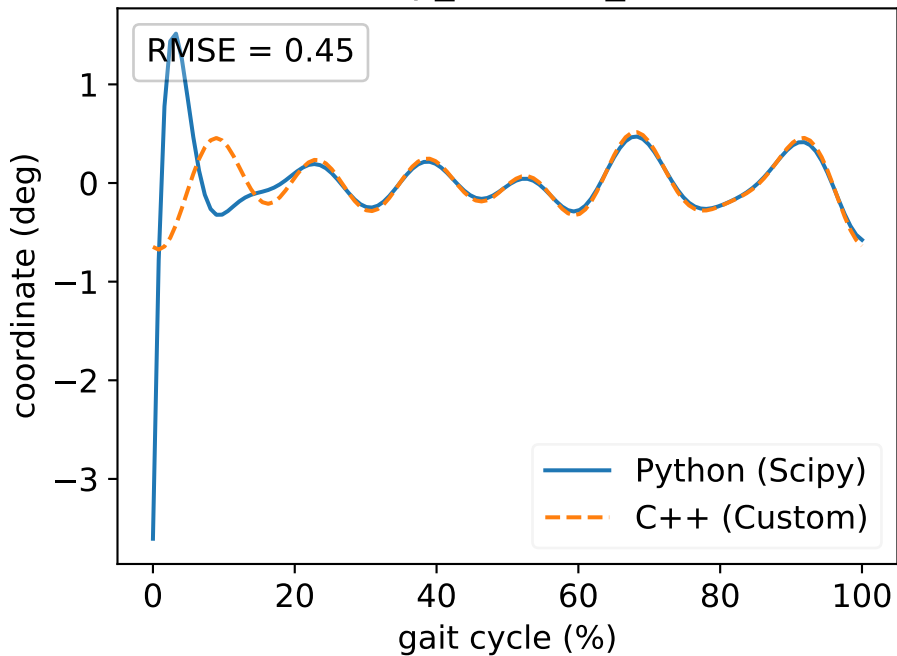


## hip\_adduction\_r

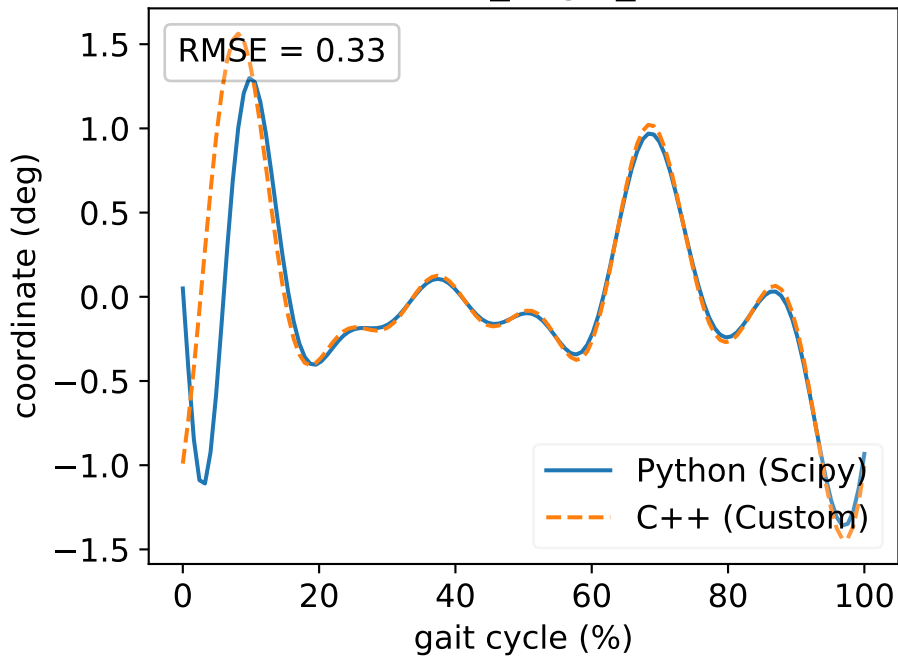




# hip\_rotation\_r



# knee\_angle\_r



# ankle\_angle\_r

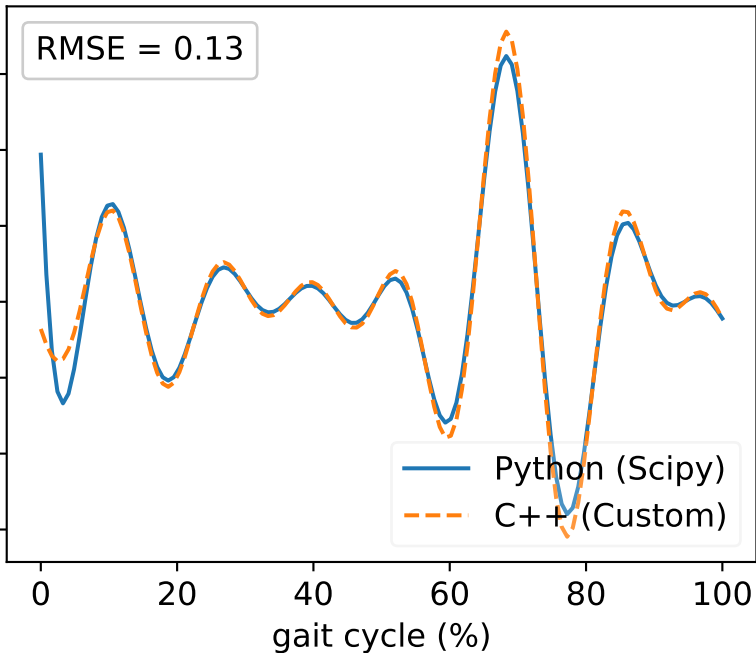
RMSE = 0.13

coordinate (deg)

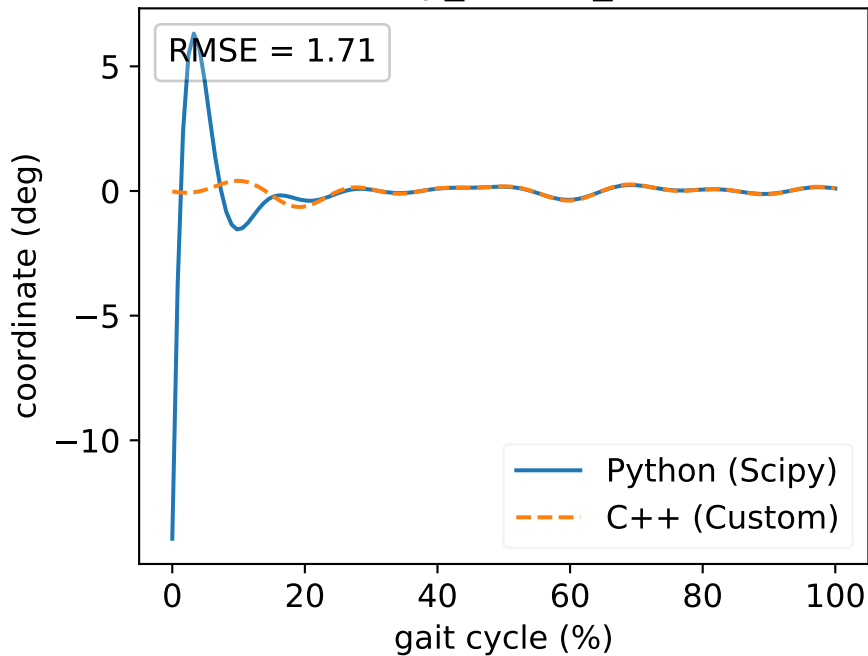
1.5  
1.0  
0.5  
0.0  
-0.5  
-1.0  
-1.5

Python (Scipy)  
C++ (Custom)

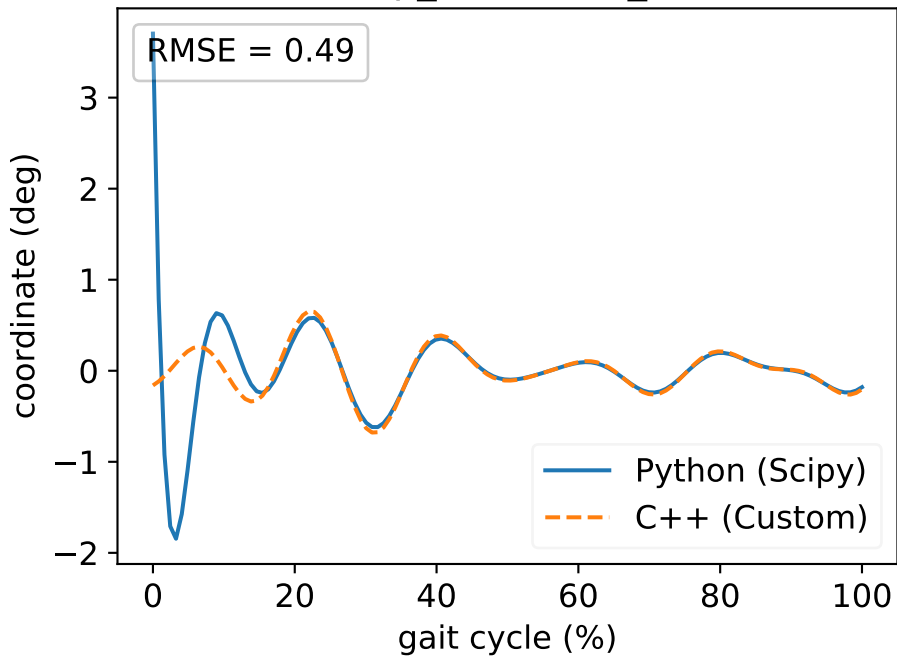
0 20 40 60 80 100  
gait cycle (%)



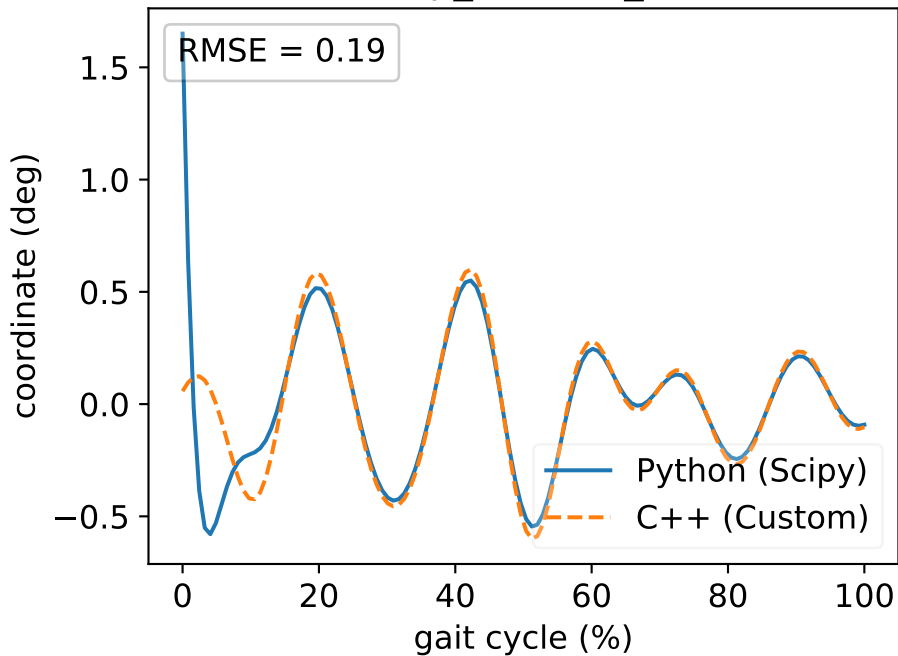
# hip\_flexion\_l



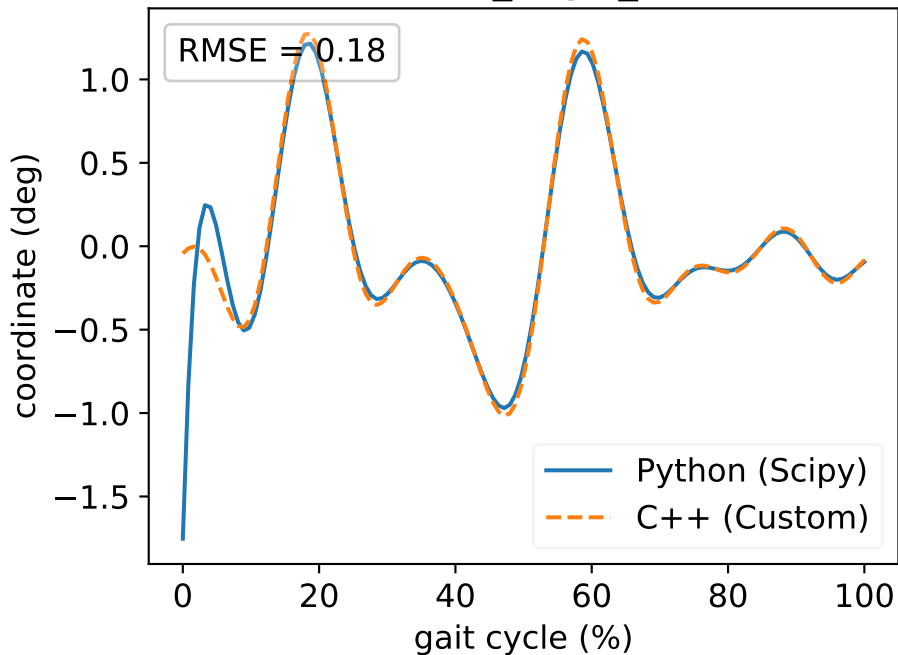
# hip\_adduction\_l



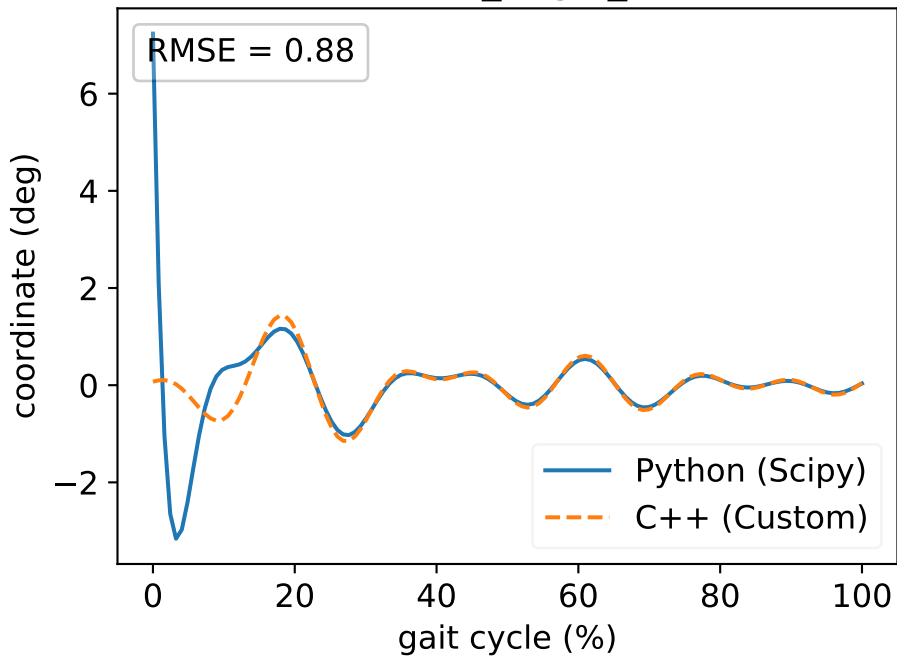
# hip\_rotation\_l



# knee\_angle\_l

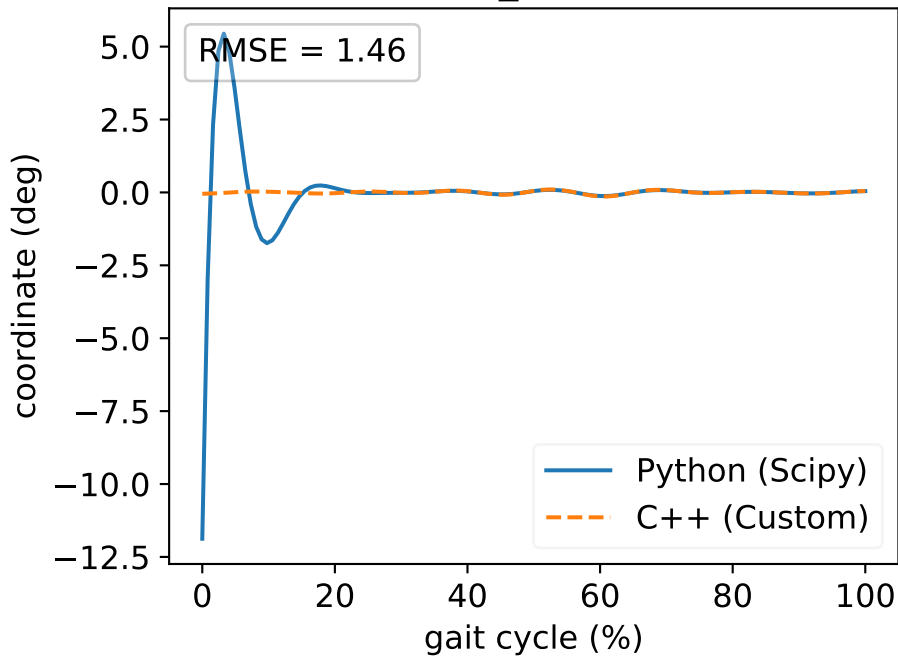


# ankle\_angle\_l

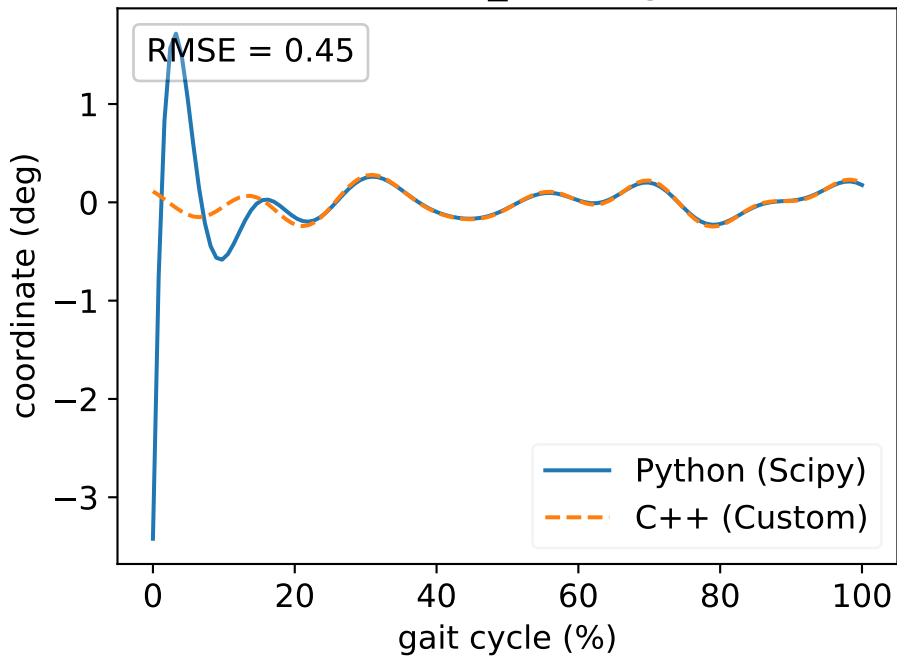




# lumbar\_extension



# lumbar\_bending



## lumbar\_rotation

