Underdetermined Forced-Pendulum Example
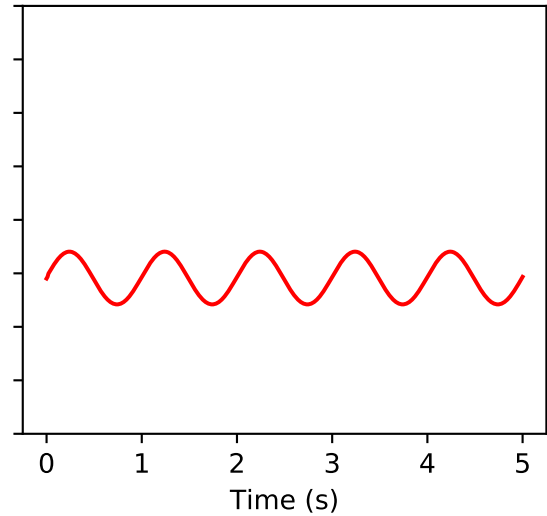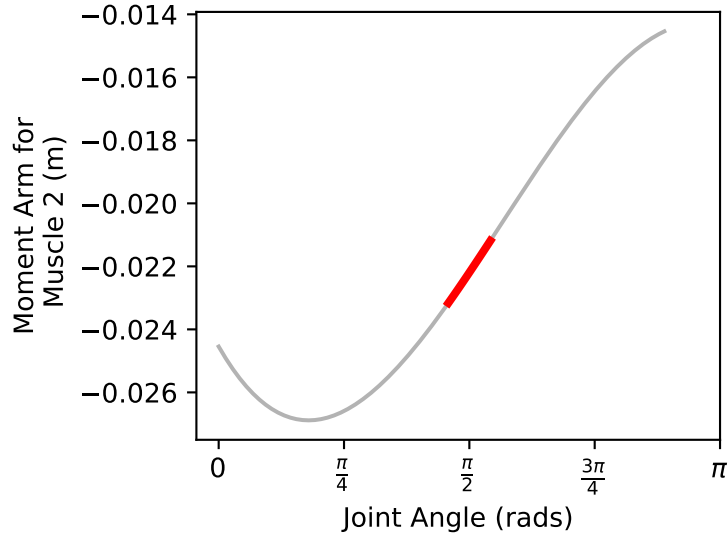
Legend:
- Output $y = x_1$ (Tension)
- Output $y = x_1$ (mm Velocity)
- Output $y = x_1$ (Activation)
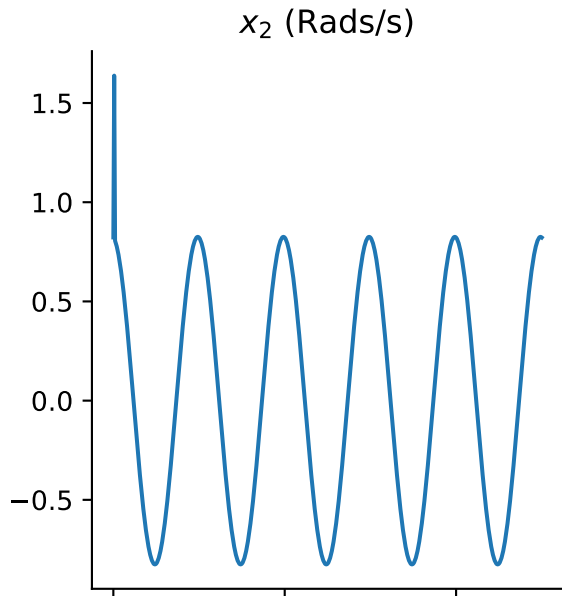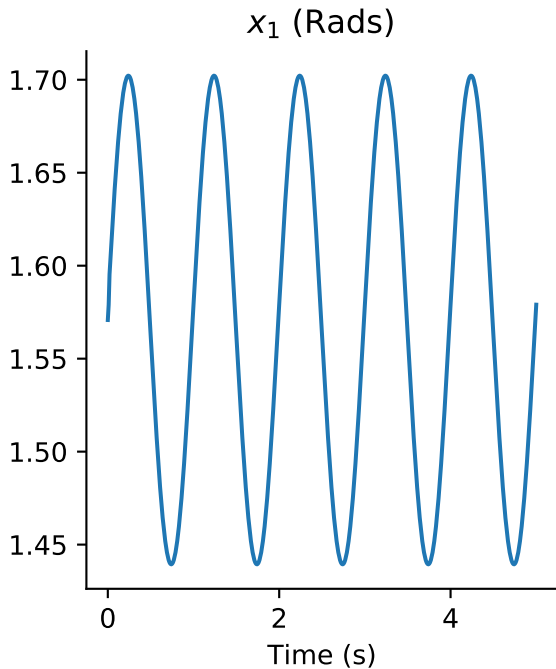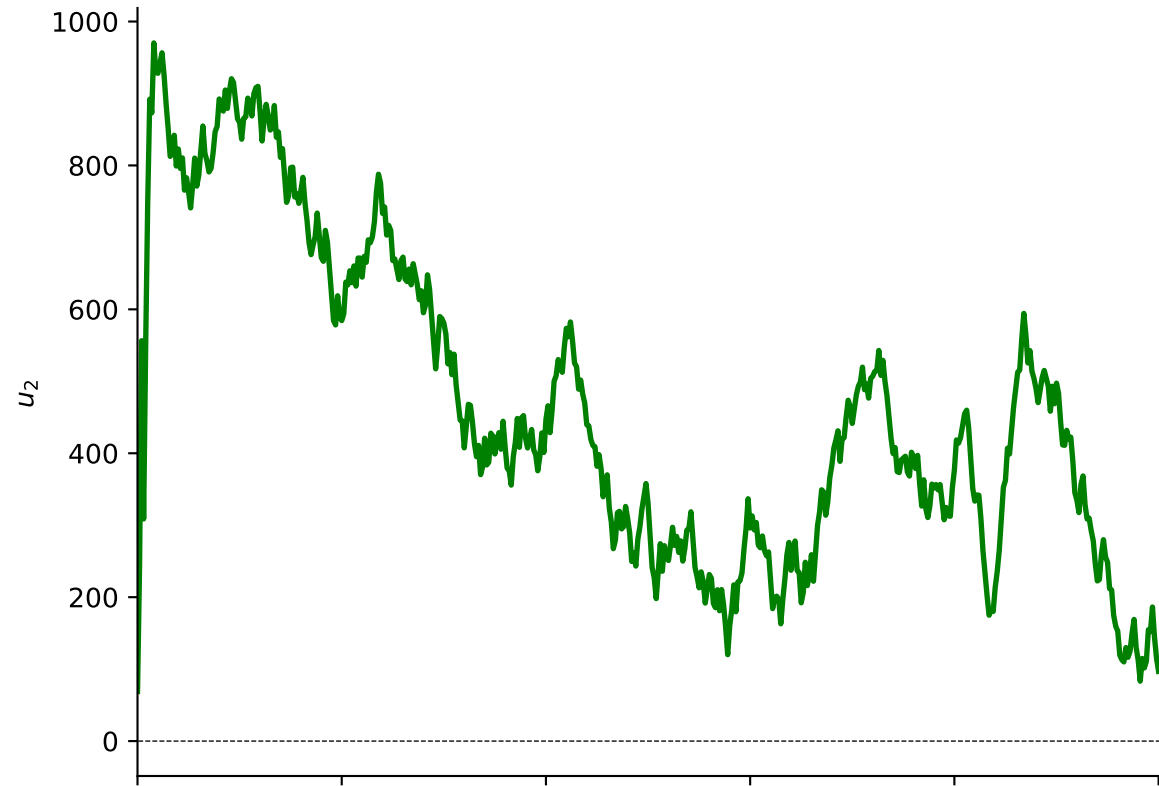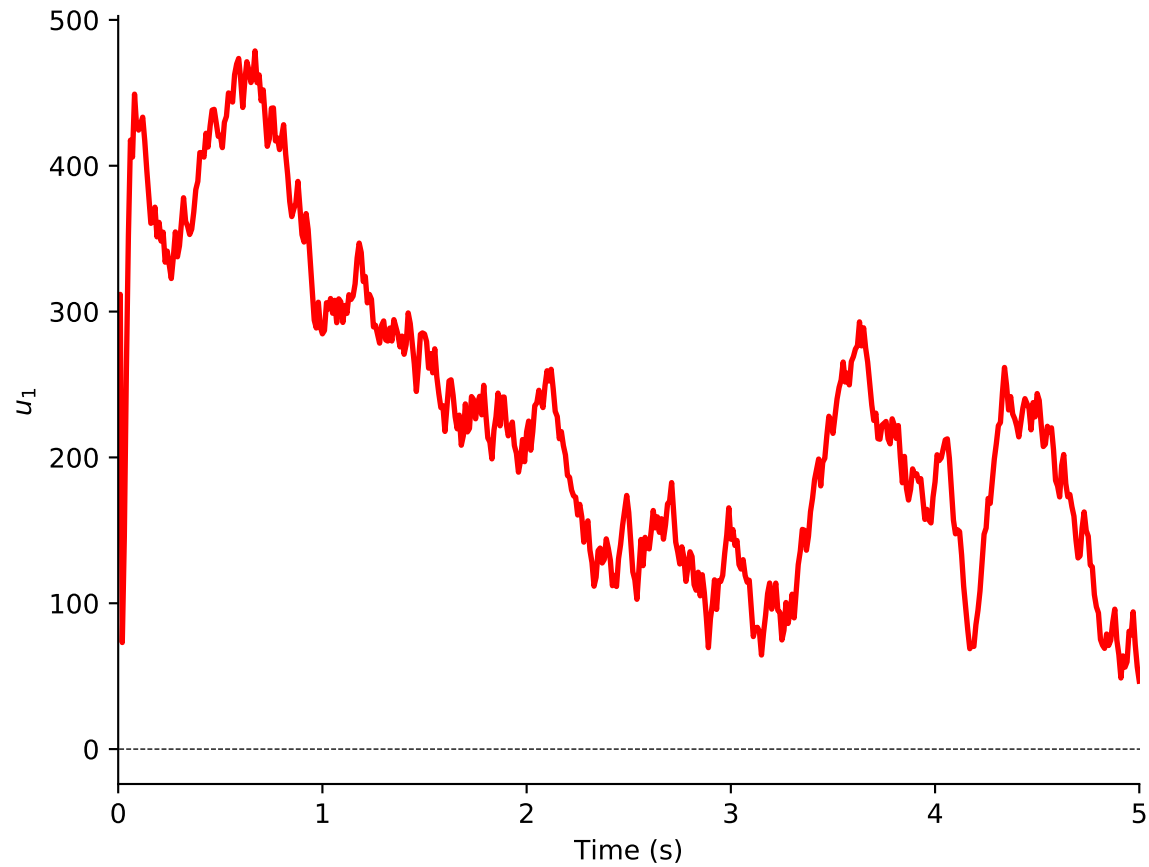- Reference $r(t) = \frac{\pi}{24}\sin(2\pi t) + \frac{\pi}{2}$

Y-axis: Desired Measure
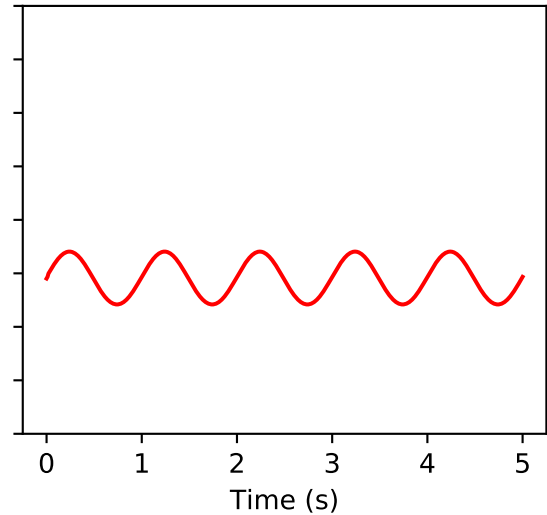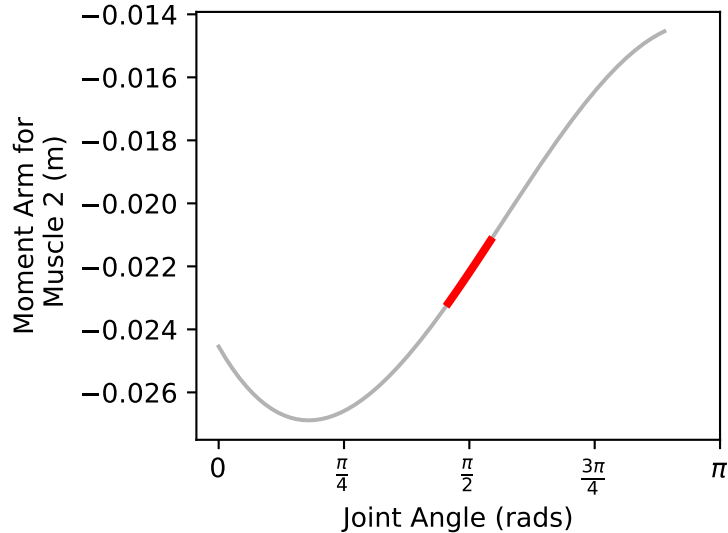X-axis: Time (s)
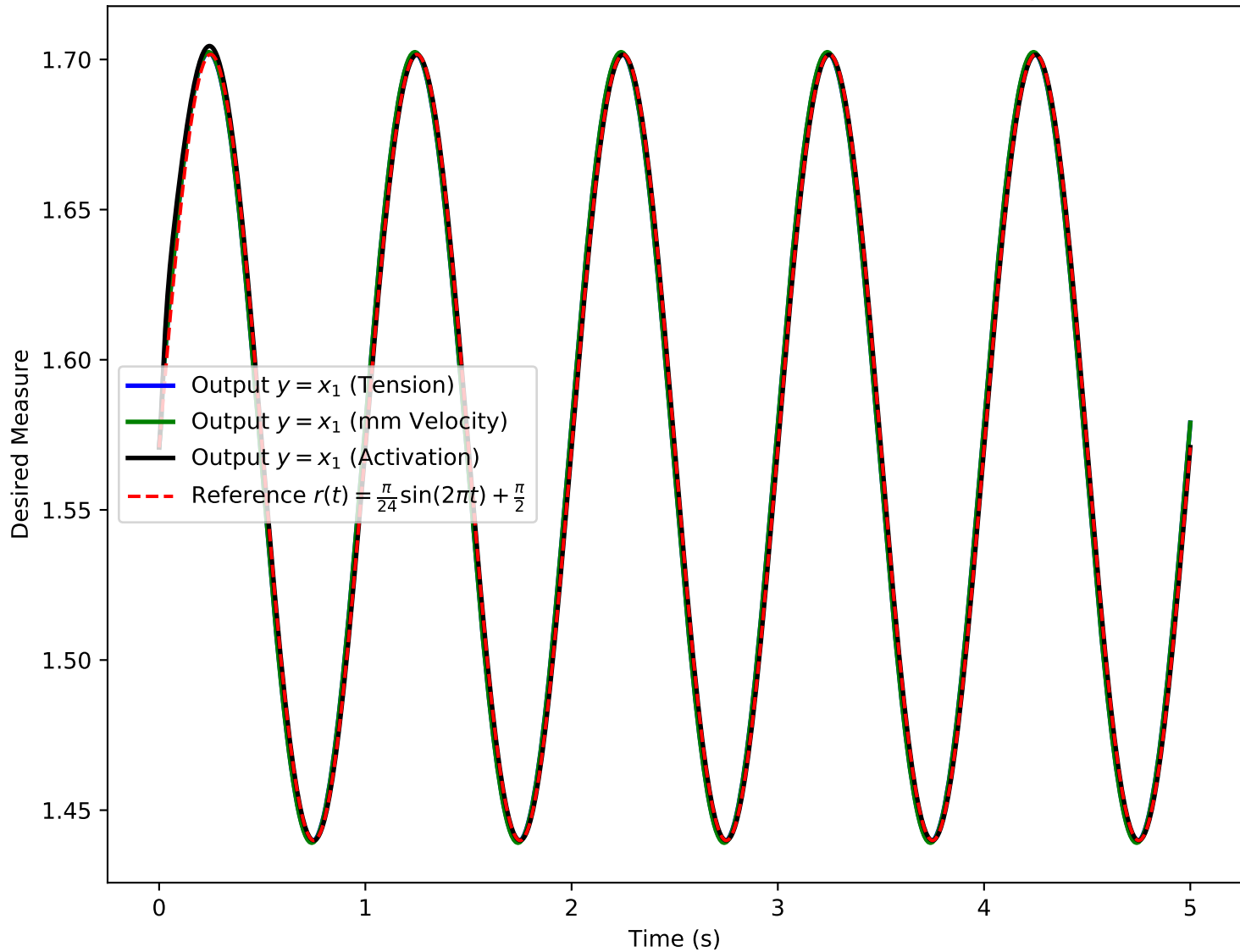
Error vs. Time
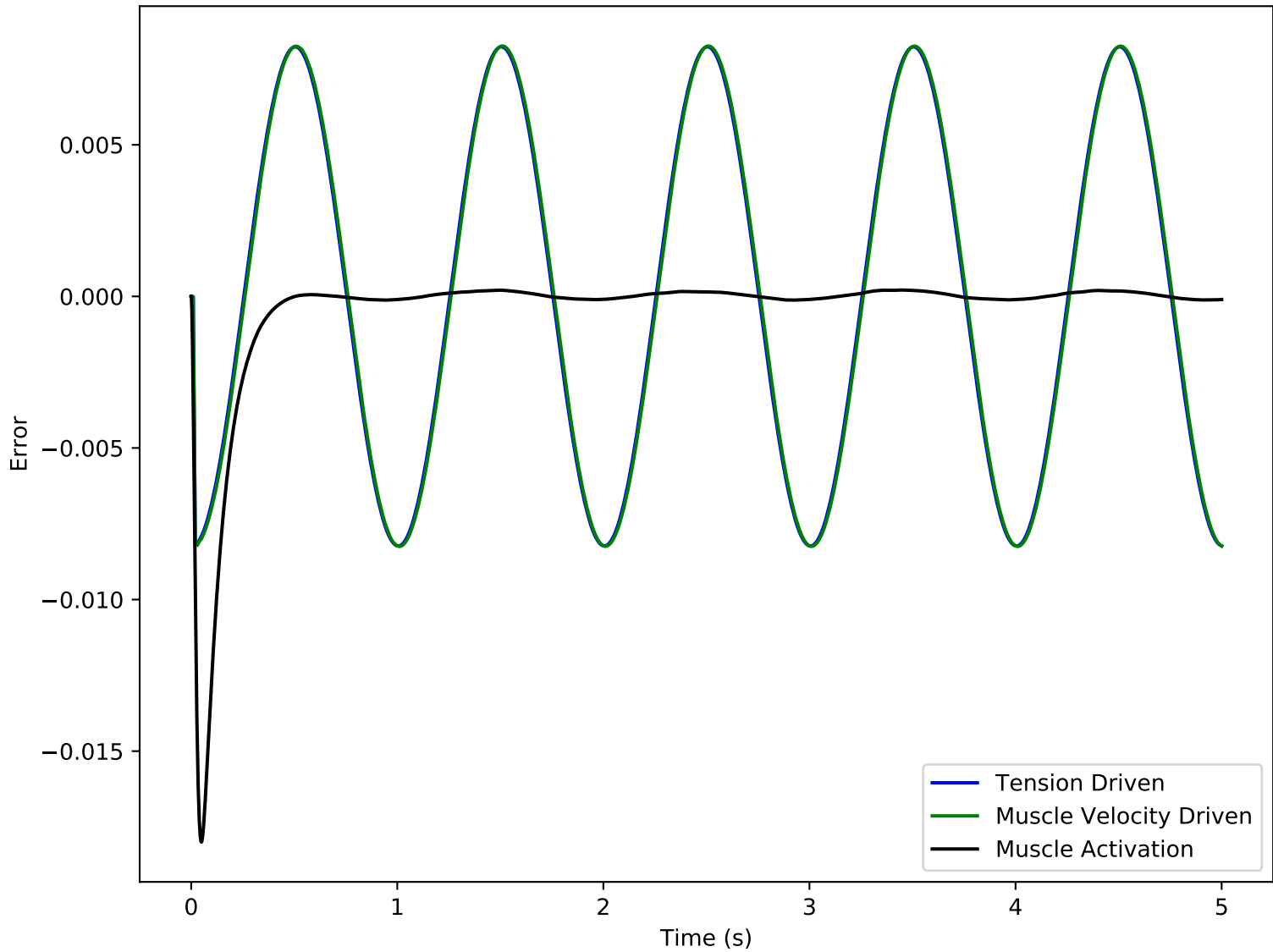
Moment arm equations
(Tendon Tension Driven)
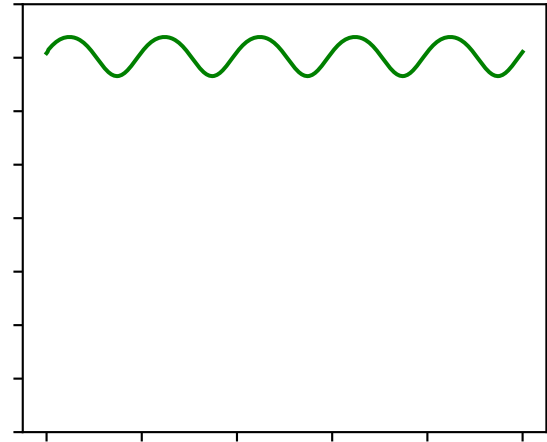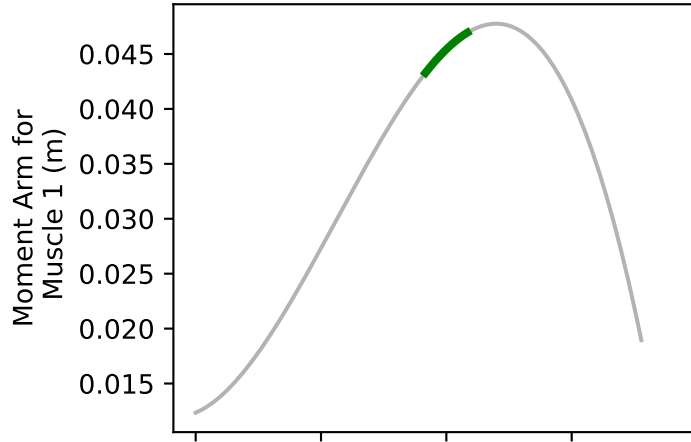
Tendon Tension Driven

x_1 (Rads)
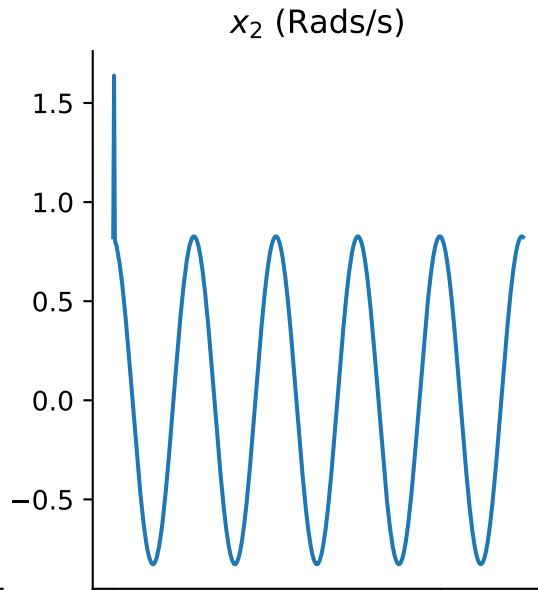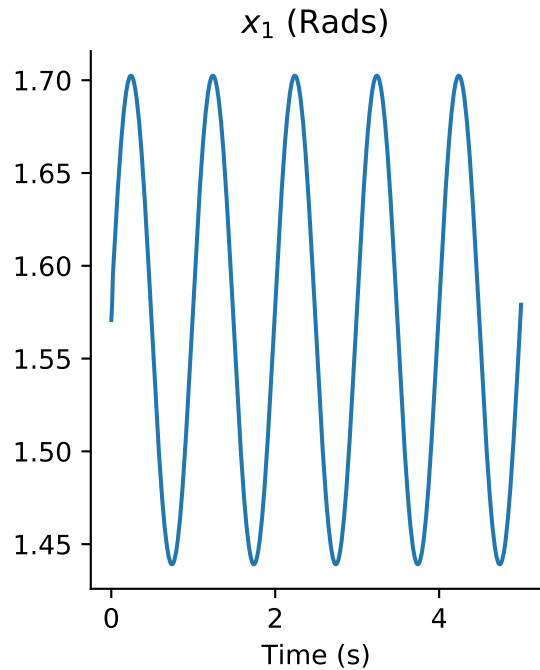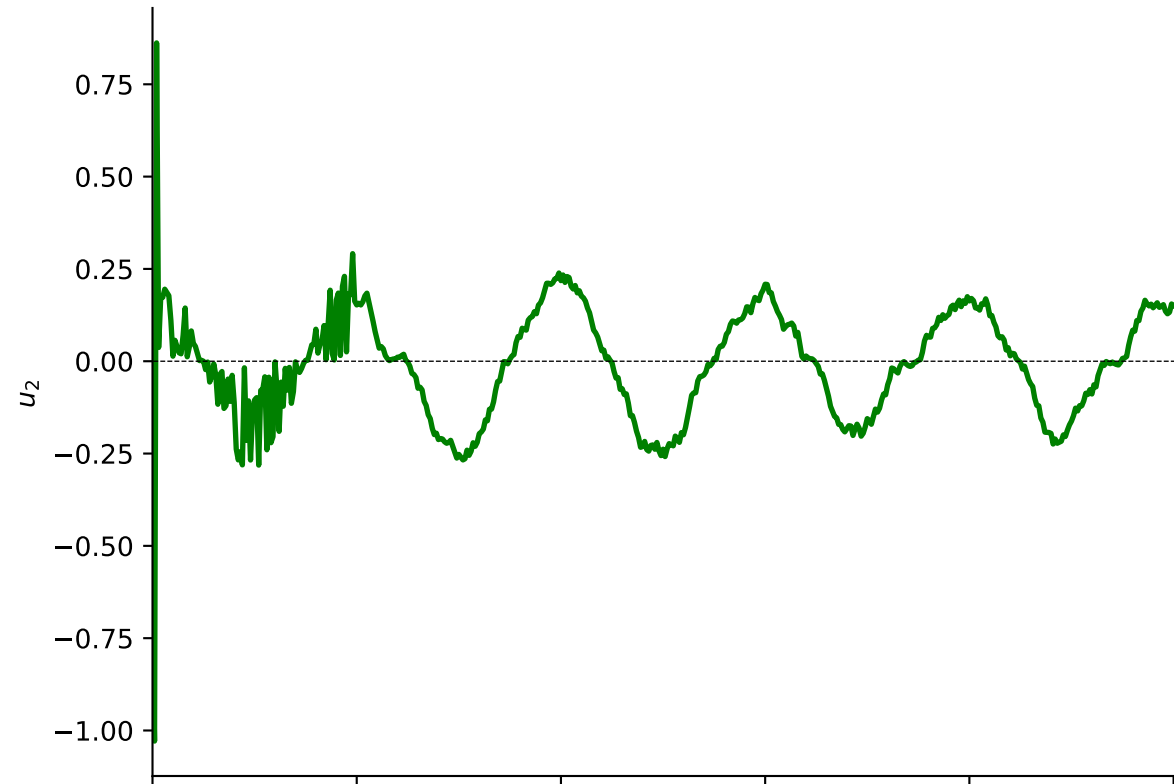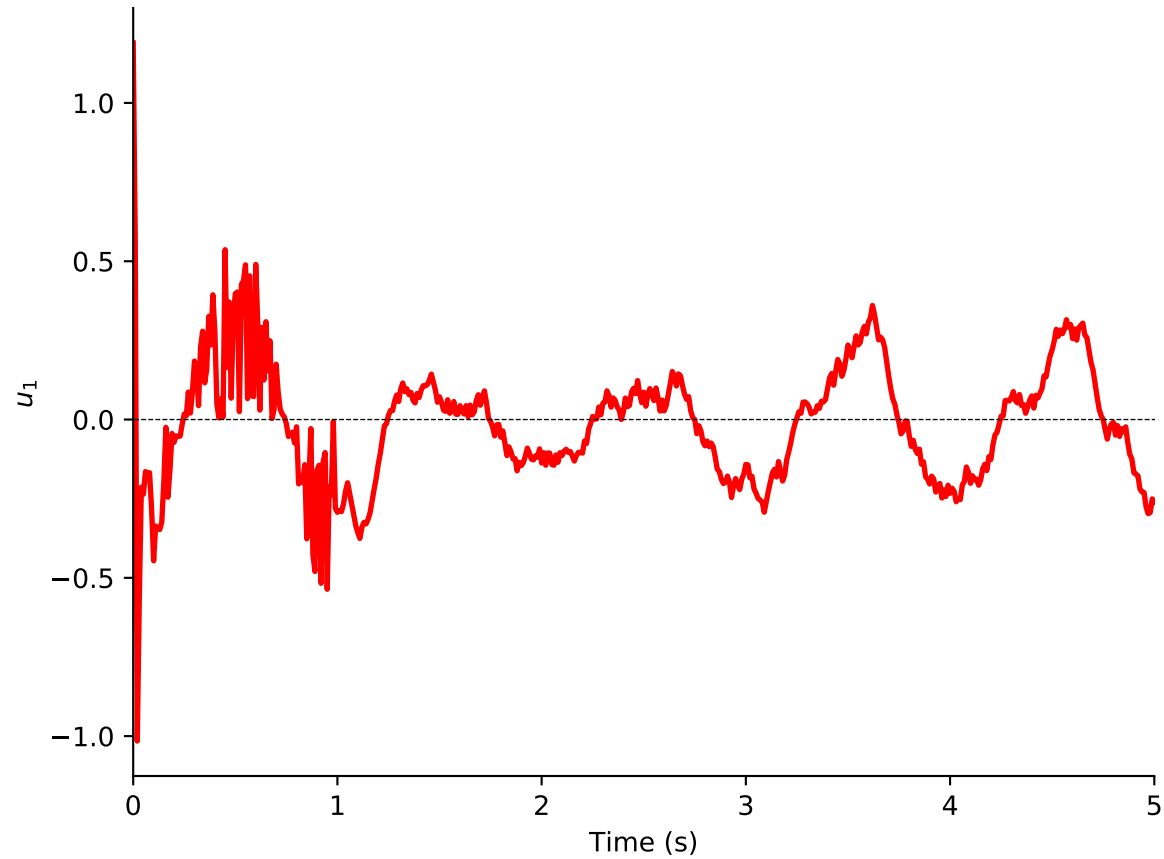
x_2 (Rads/s)

Tendon Tension vs. Time

Moment arm equations
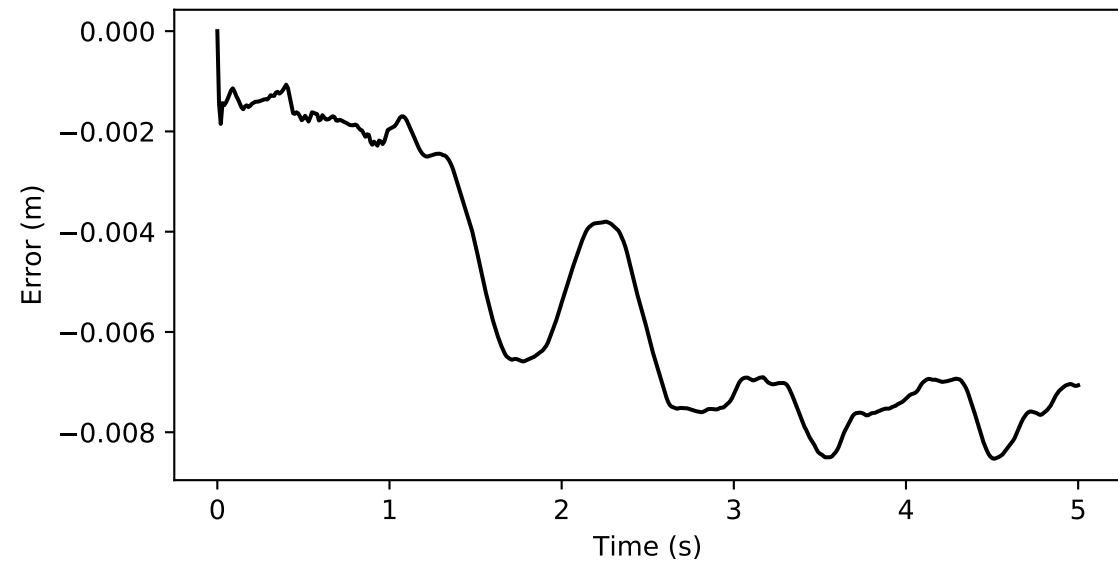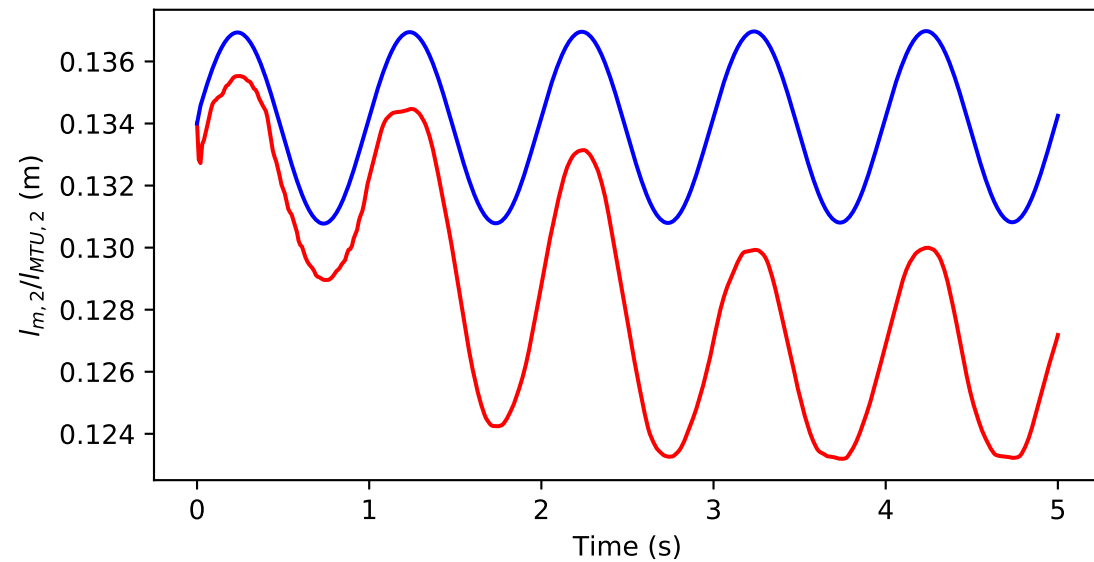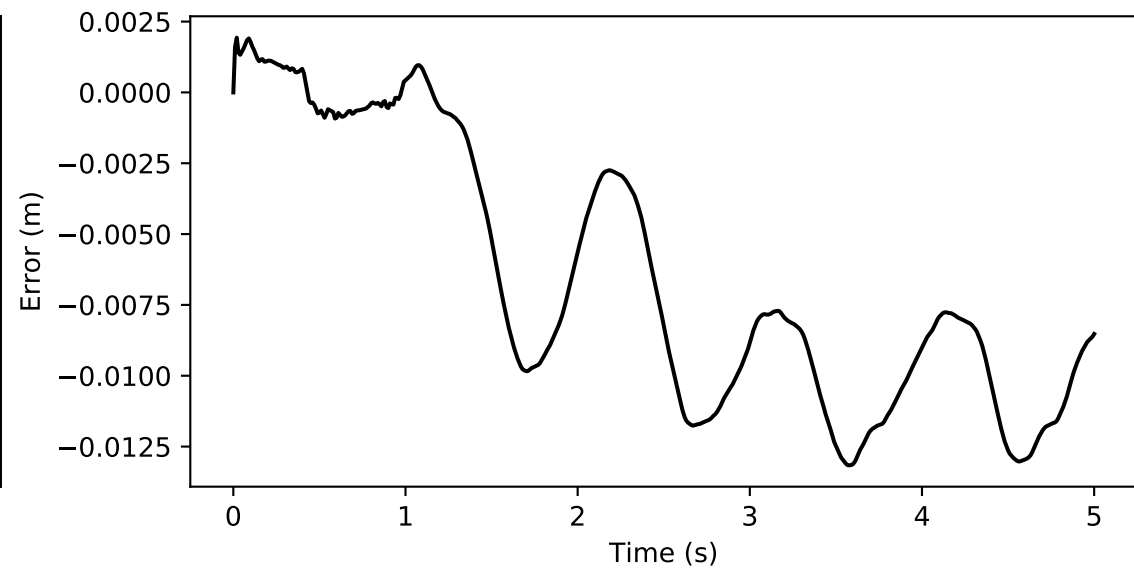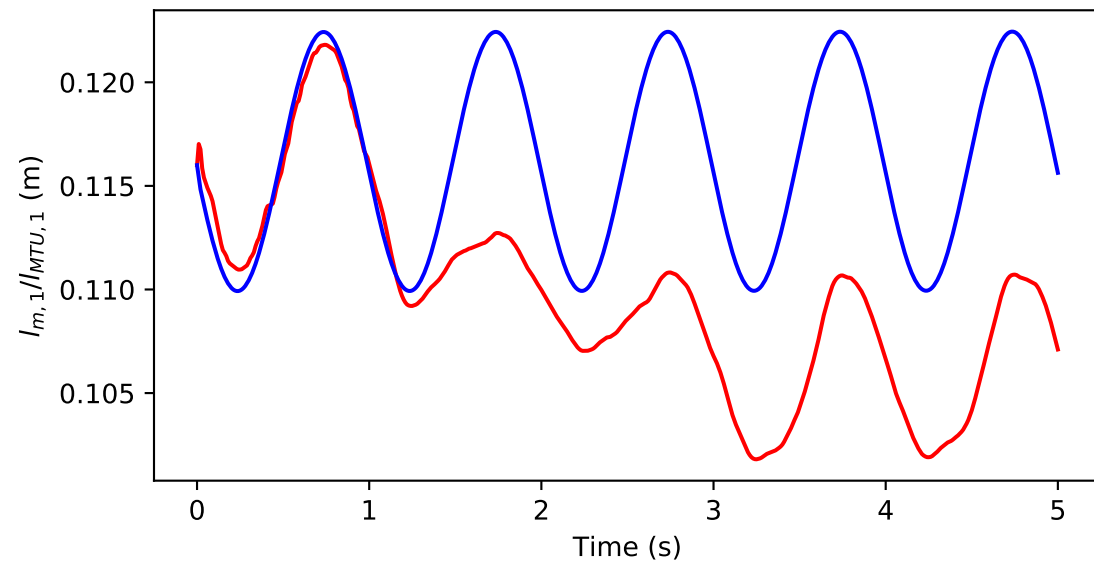(Normalized Muscle Velocities Driven)
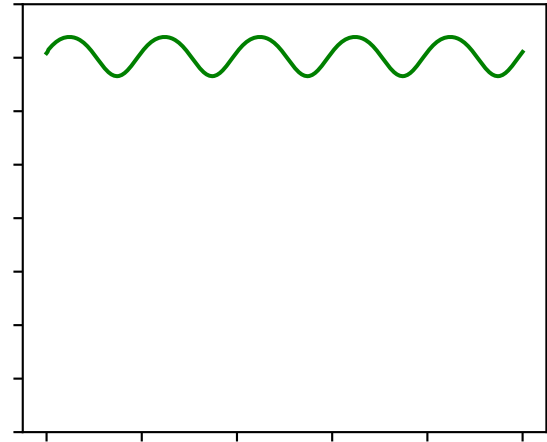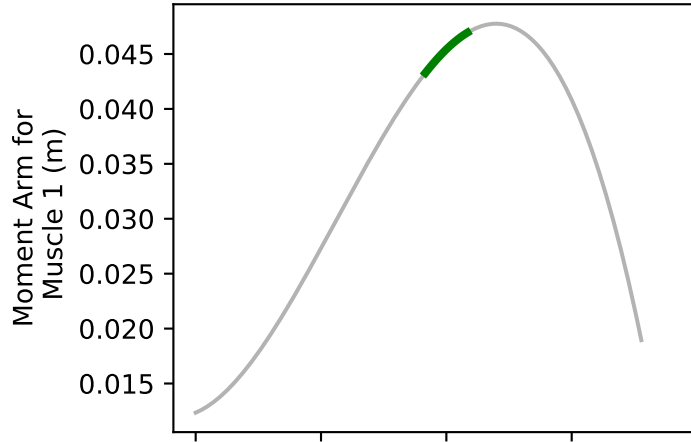
Normalized Muscle Velocities Driven
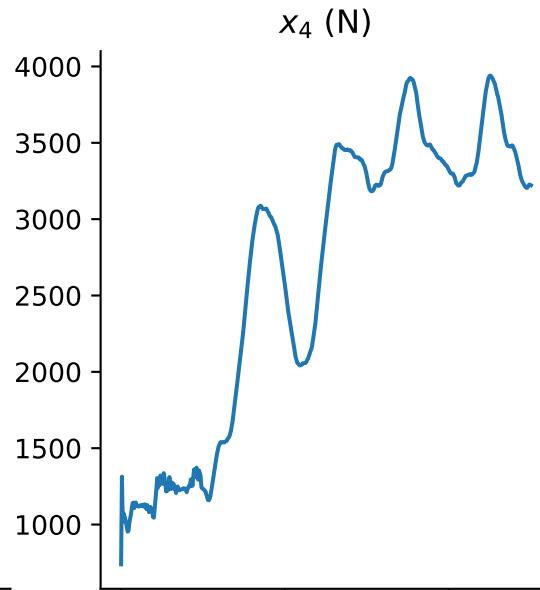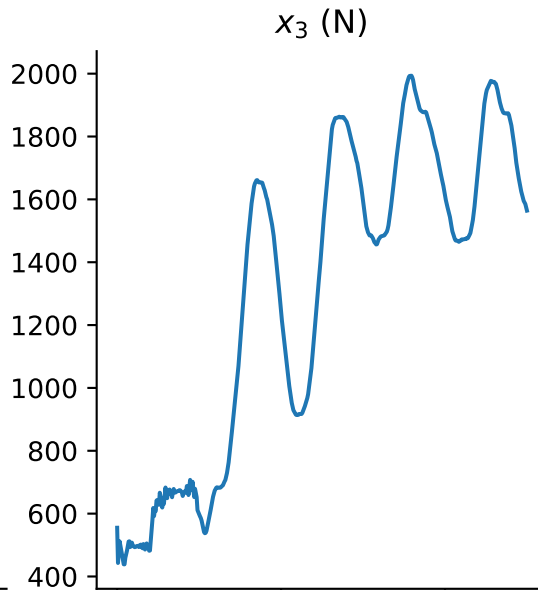
Normalized Muscle Velocities vs. Time

Muscle vs. Musculotendon Lengths
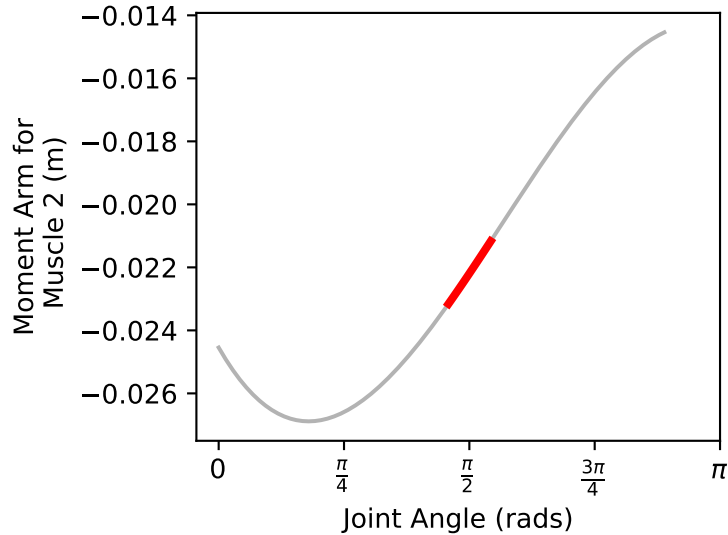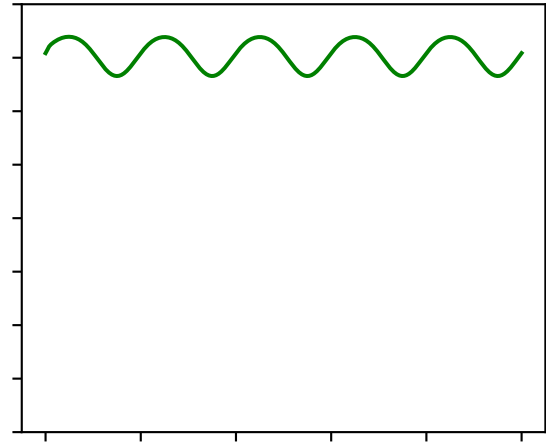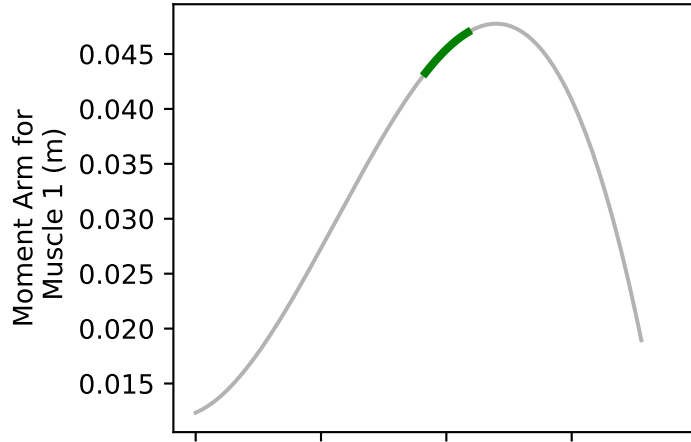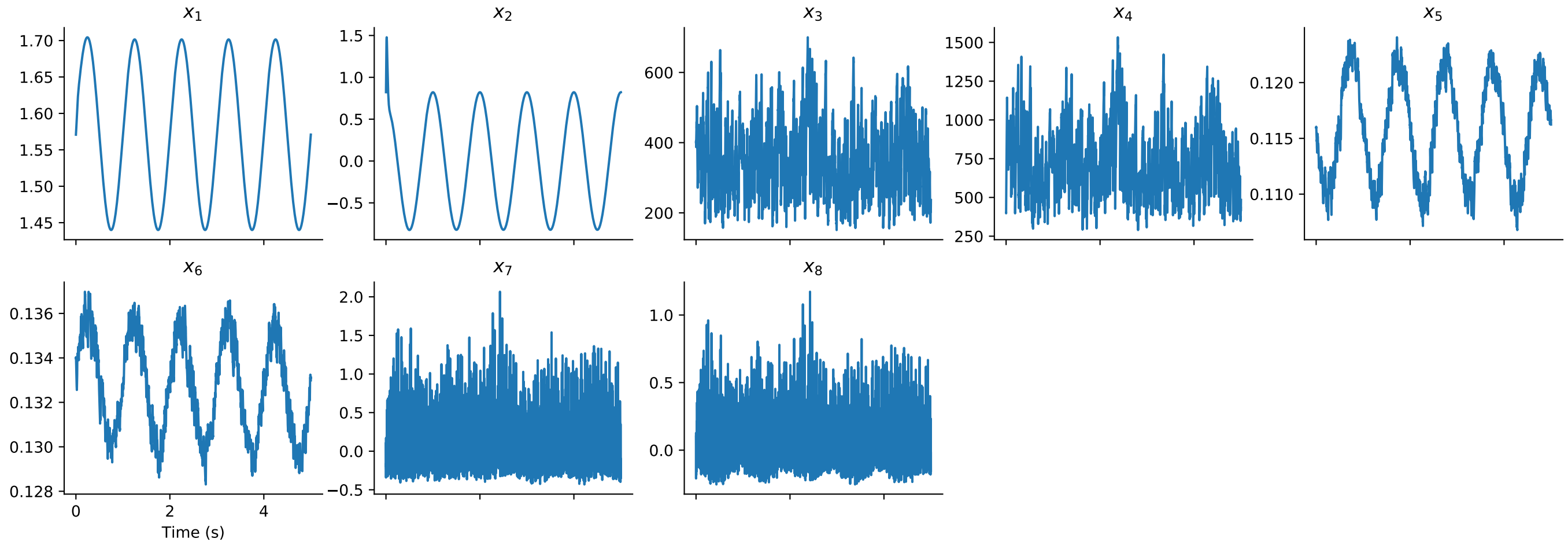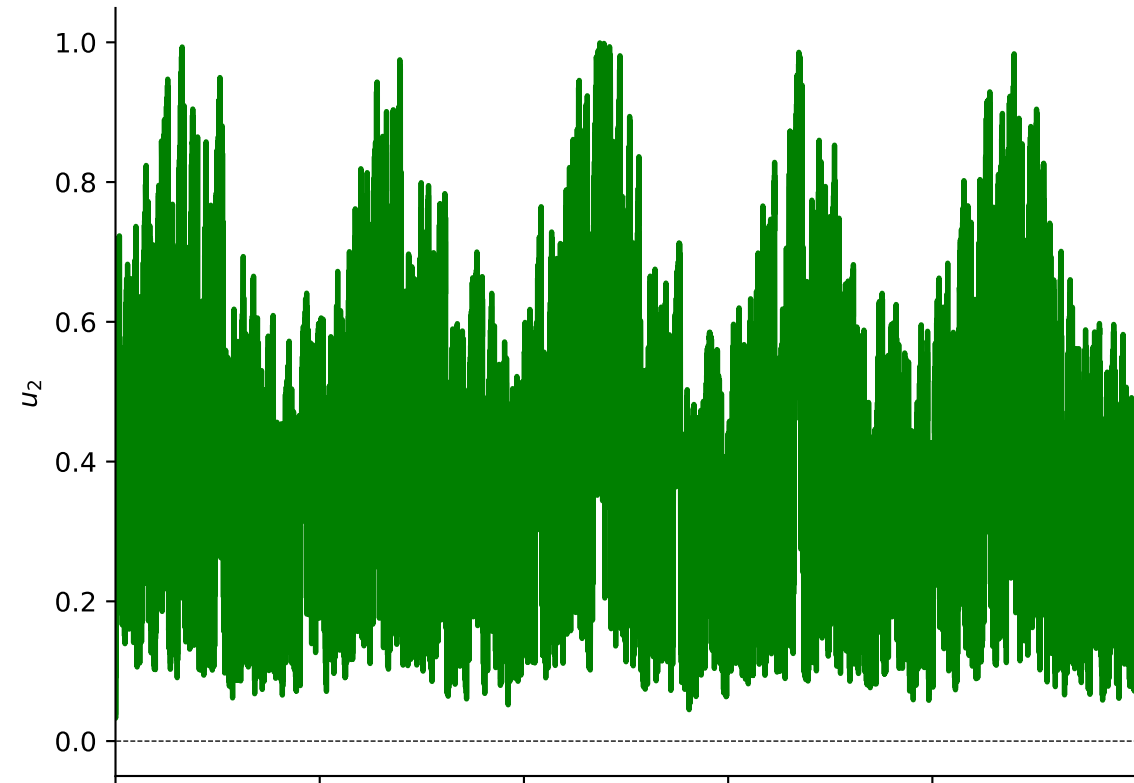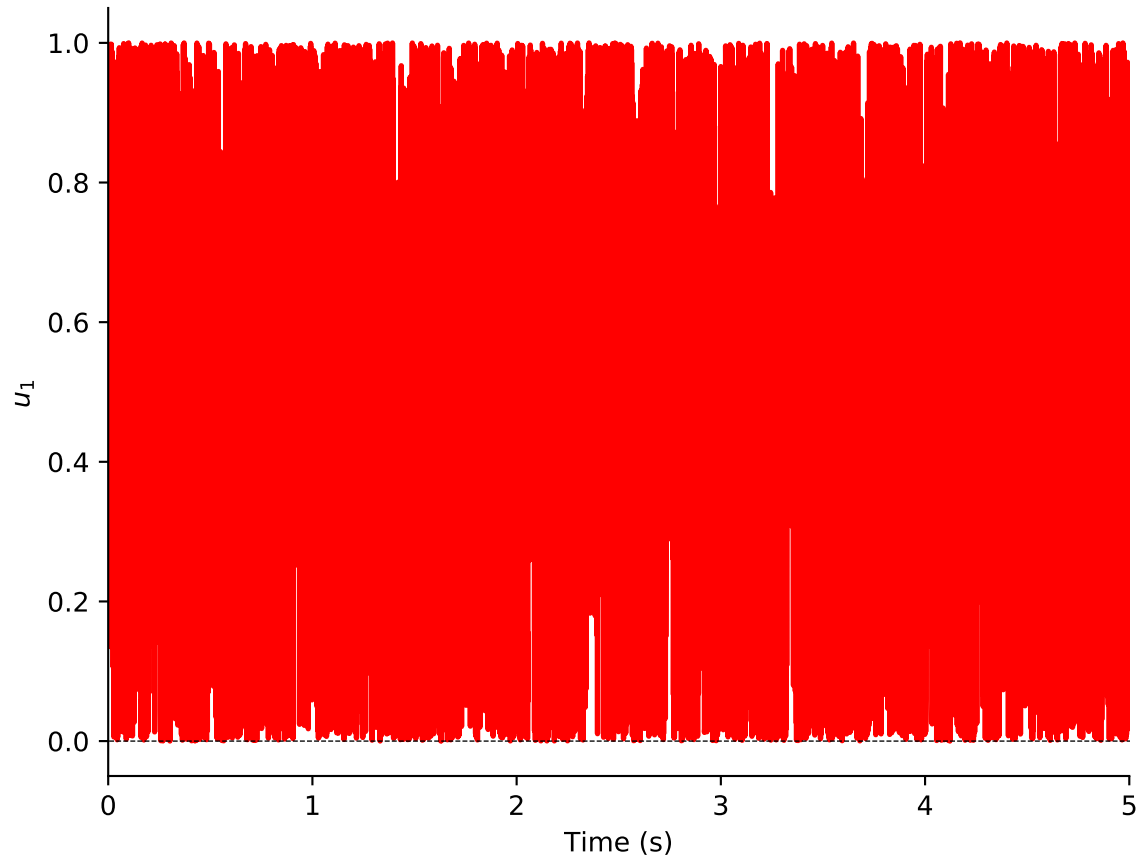Muscle Velocity Driven

Moment arm equations
(Muscle Activations Driven)
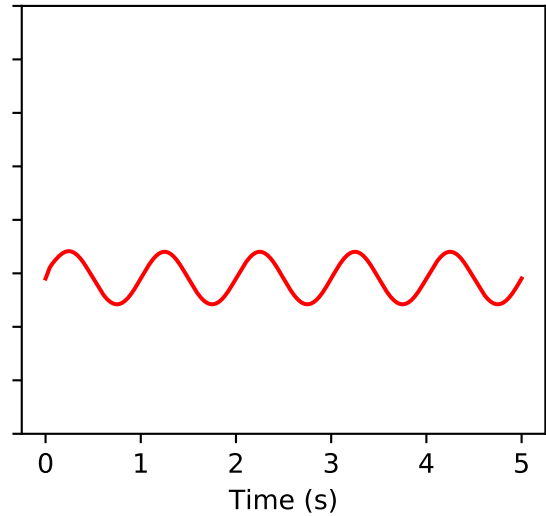
Muscle Activations Driven

Muscle Activations vs. Time

Muscle vs. Musculotendon Lengths
Muscle Activation Driven