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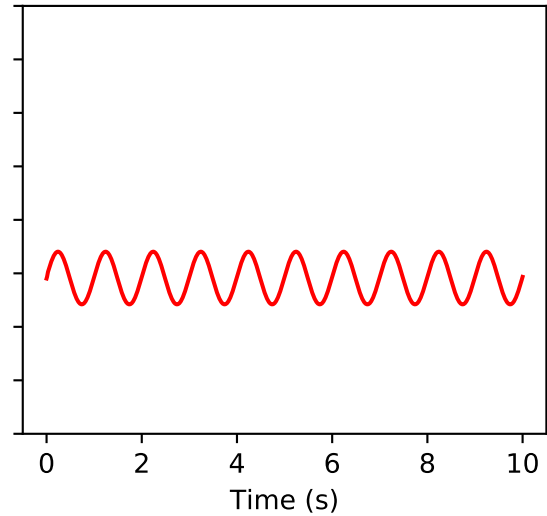
Legend:
- Output $y = x_1$ (Tension)
- Output $y = x_1$ (mm Velocity)
- Output $y = x_1$ (Activation)
- Reference $r(t) = \frac{\pi}{24}\sin(2\pi t) + \frac{\pi}{2}$

Desired Measure (y-axis)
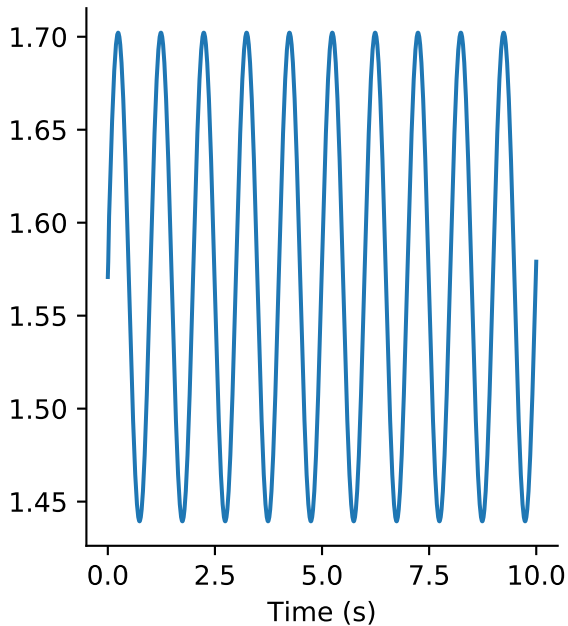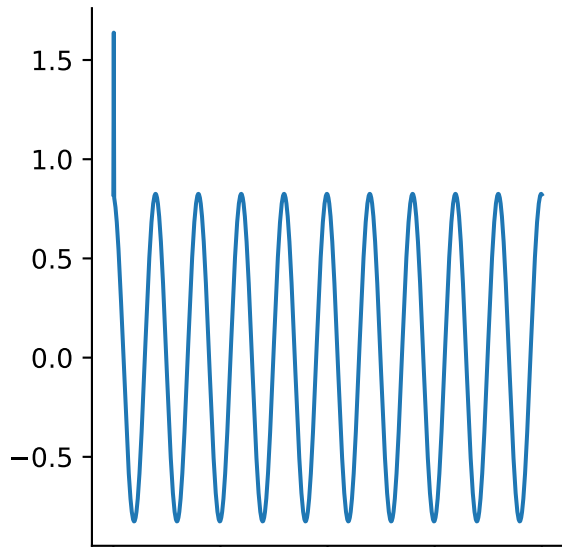Time (s) (x-axis)
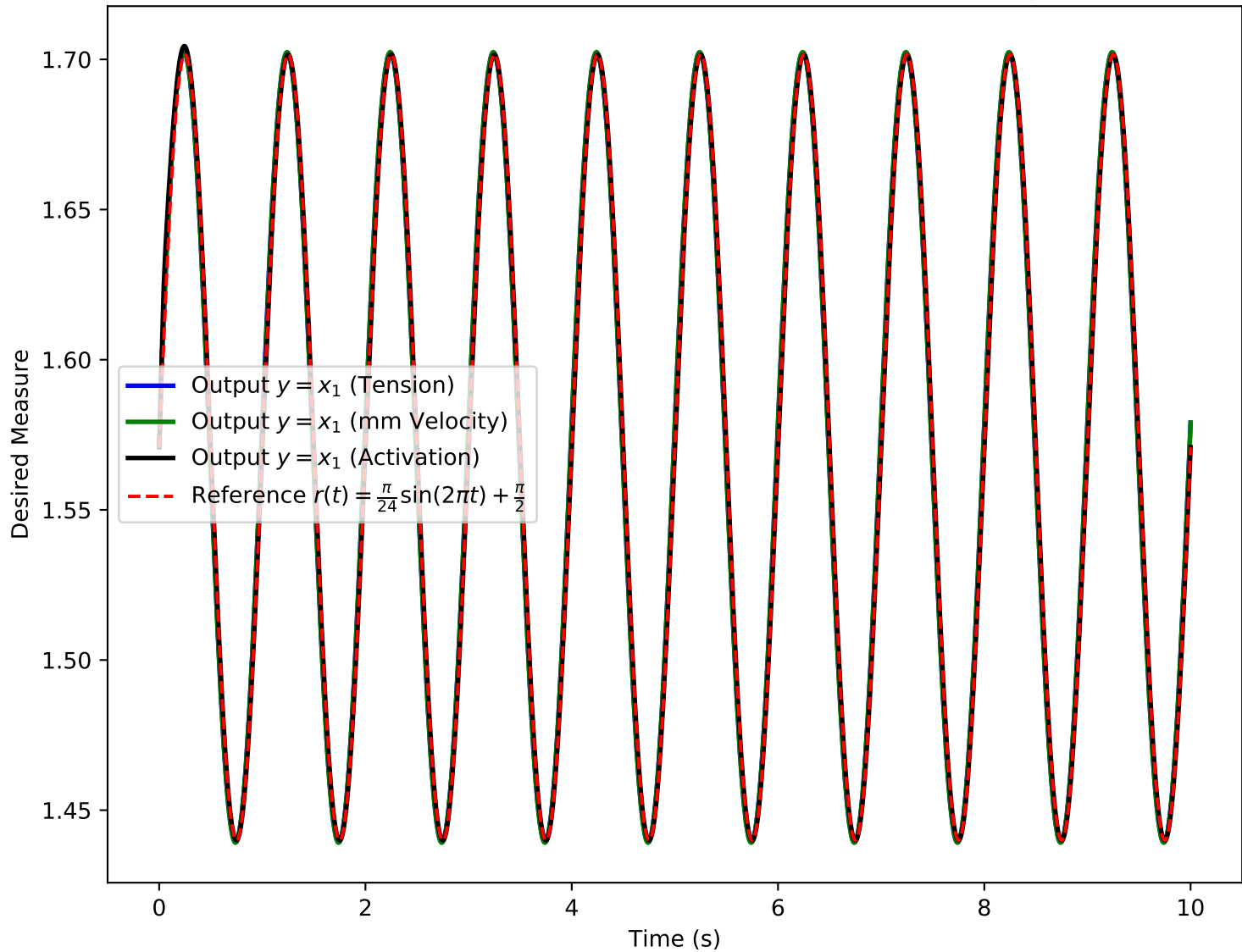
Error vs. Time
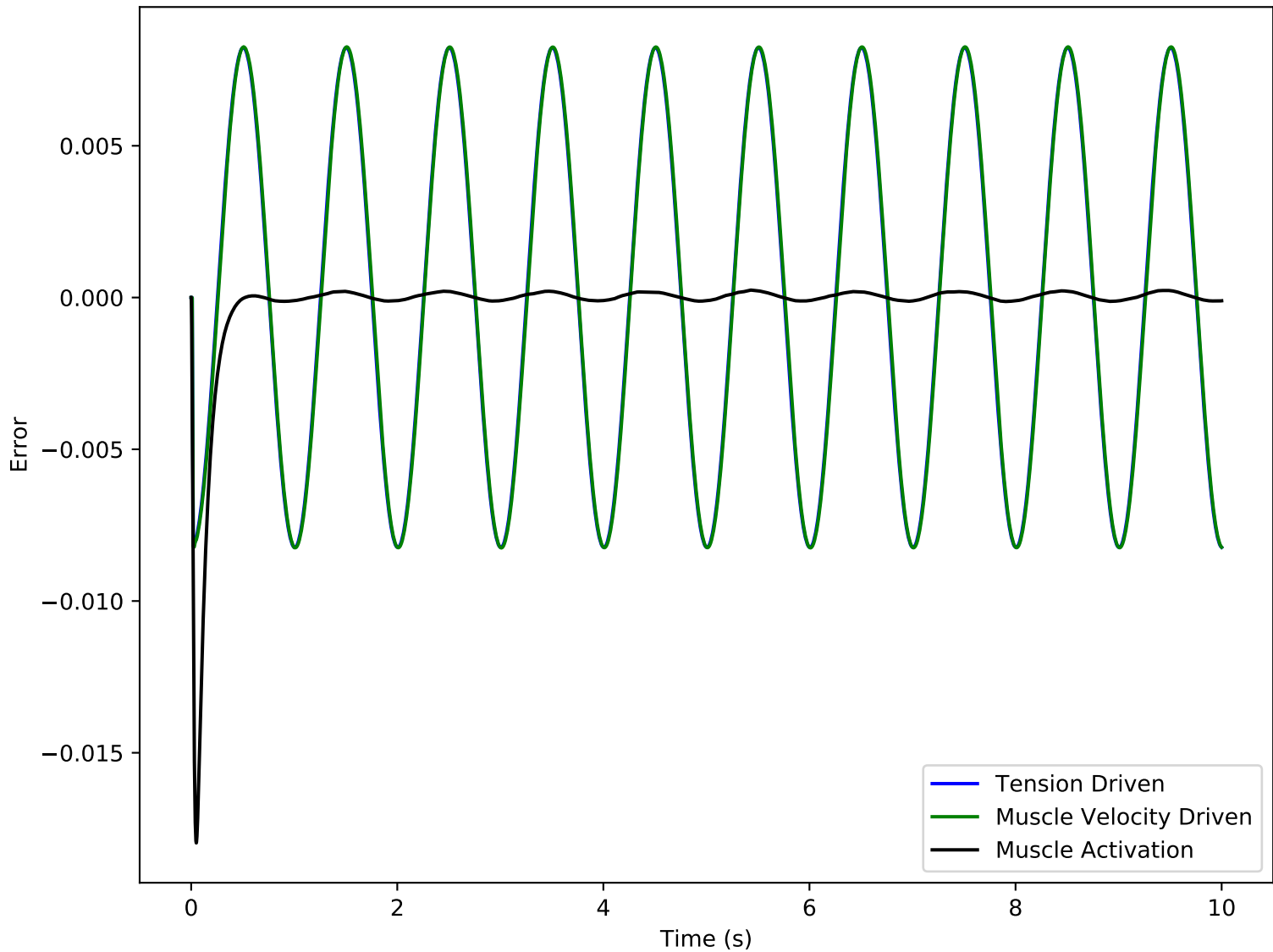
Moment arm equations
(Tendon Tension Driven)
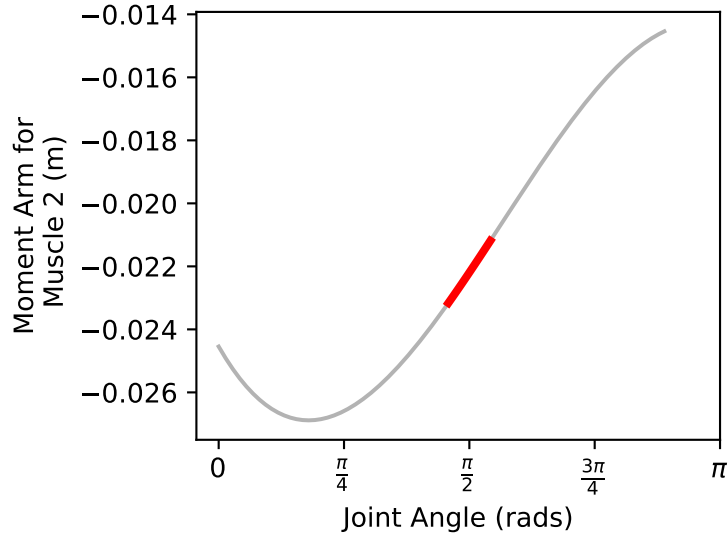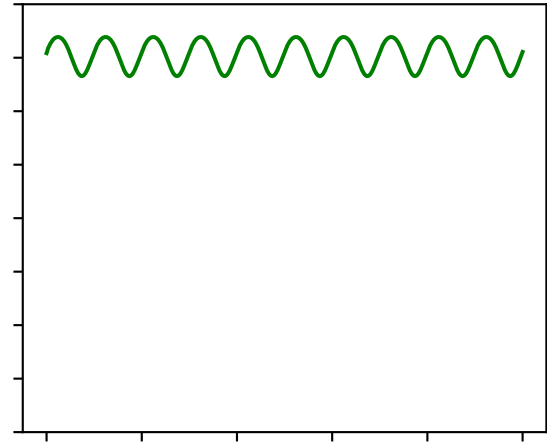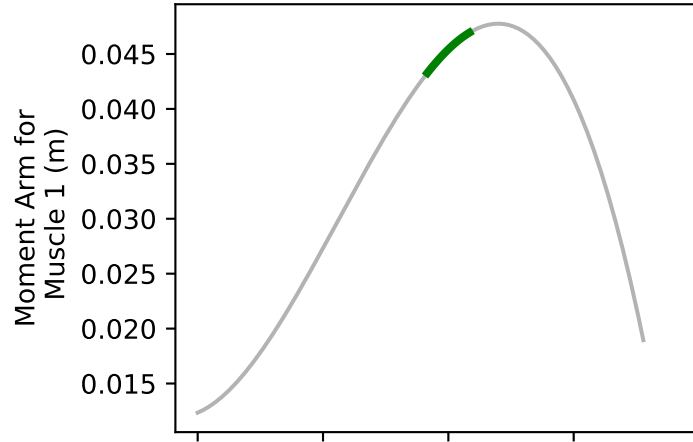
Tendon Tension Driven

x_1 (Rads)

x_2 (Rads/s)

Time (s)

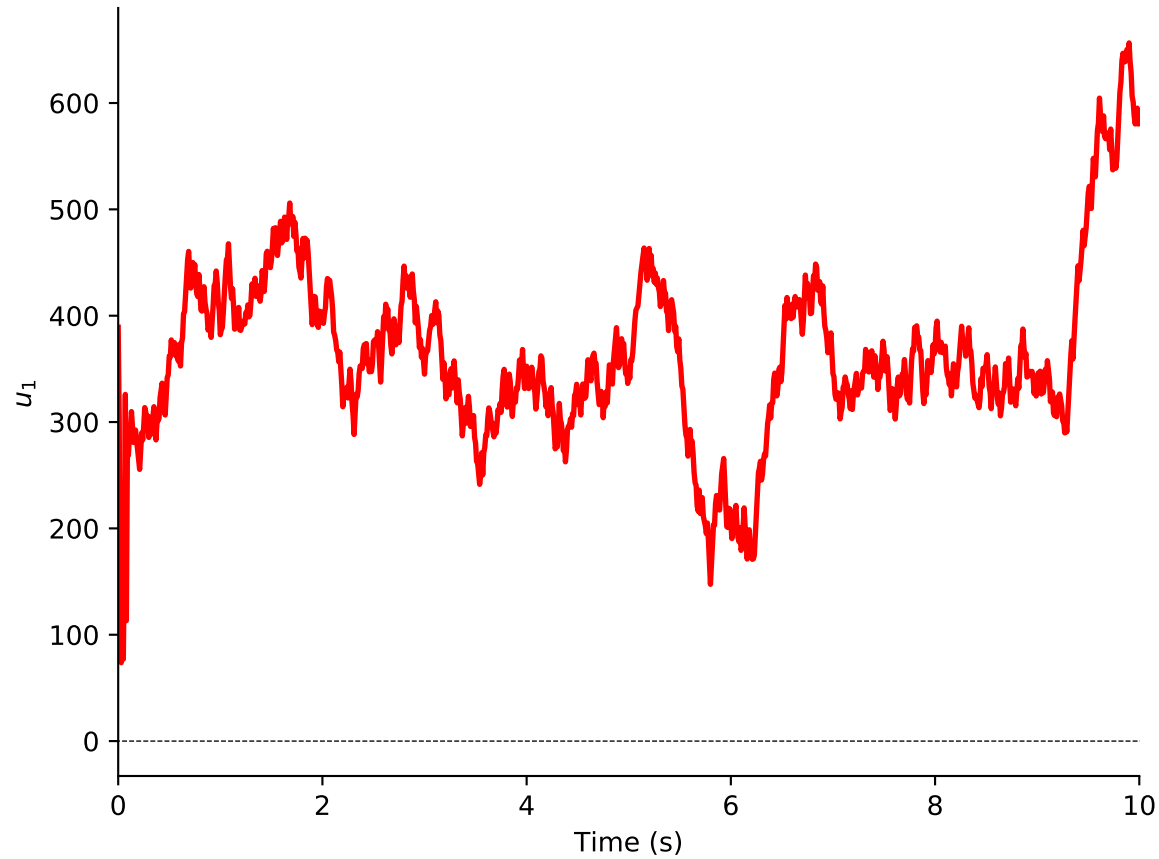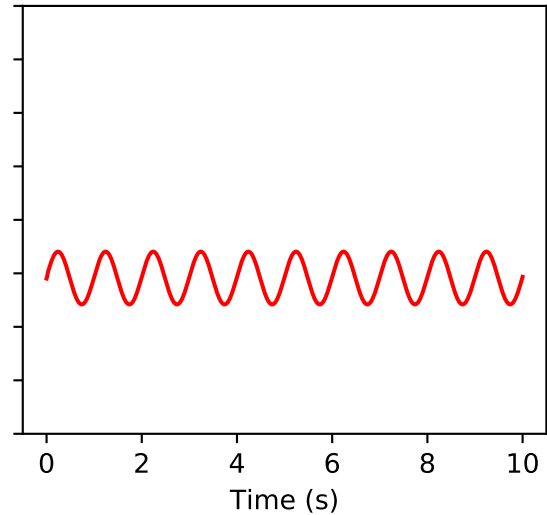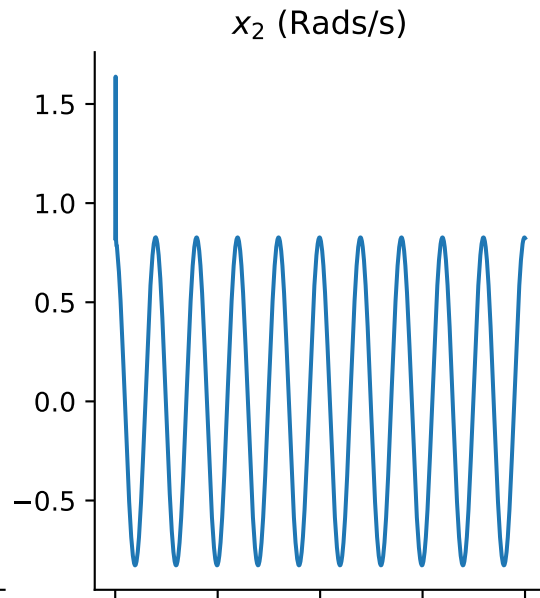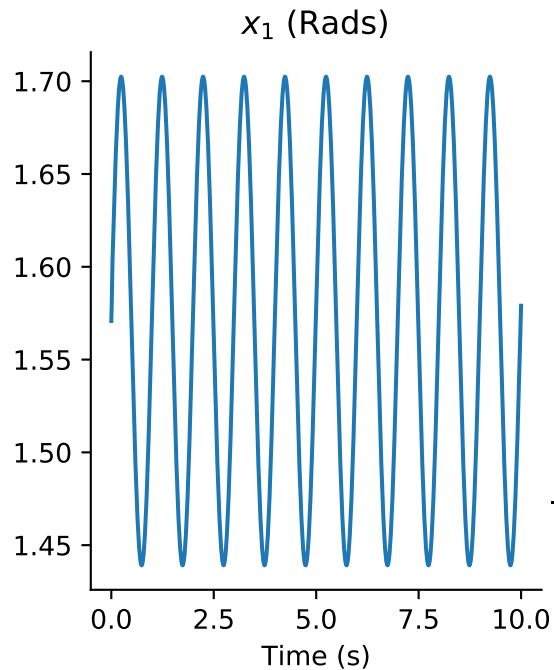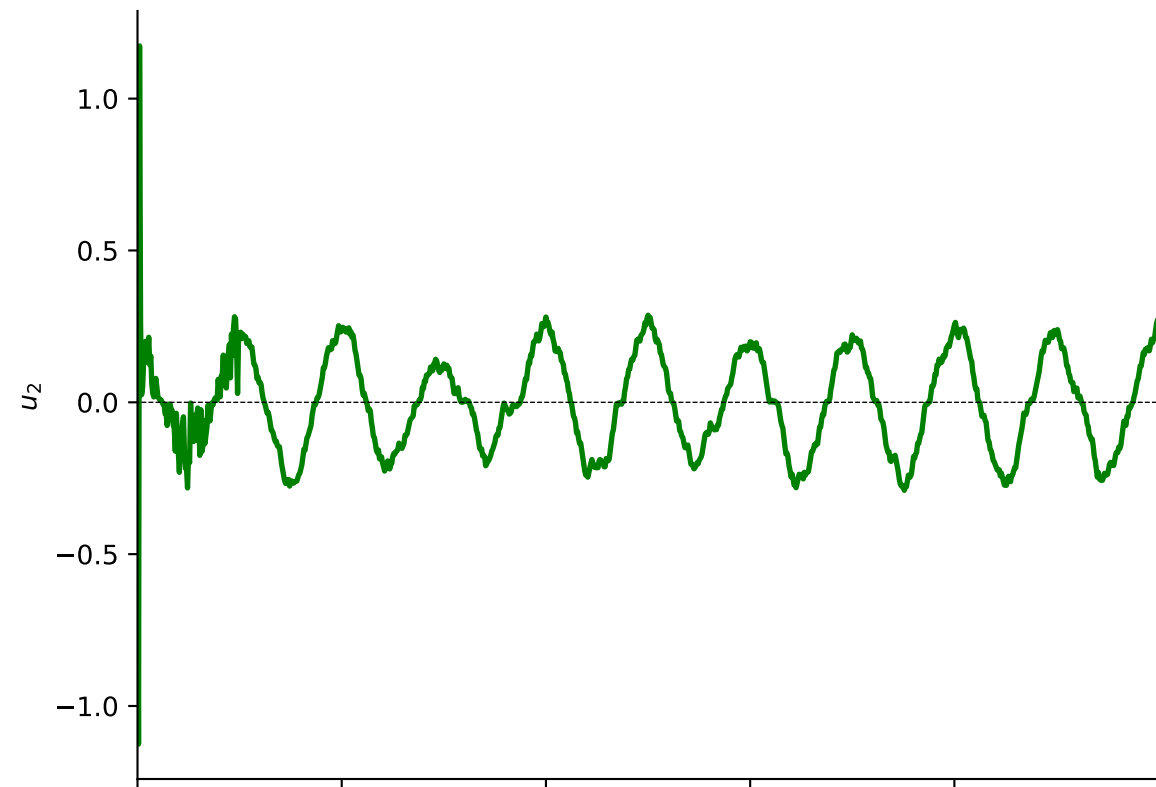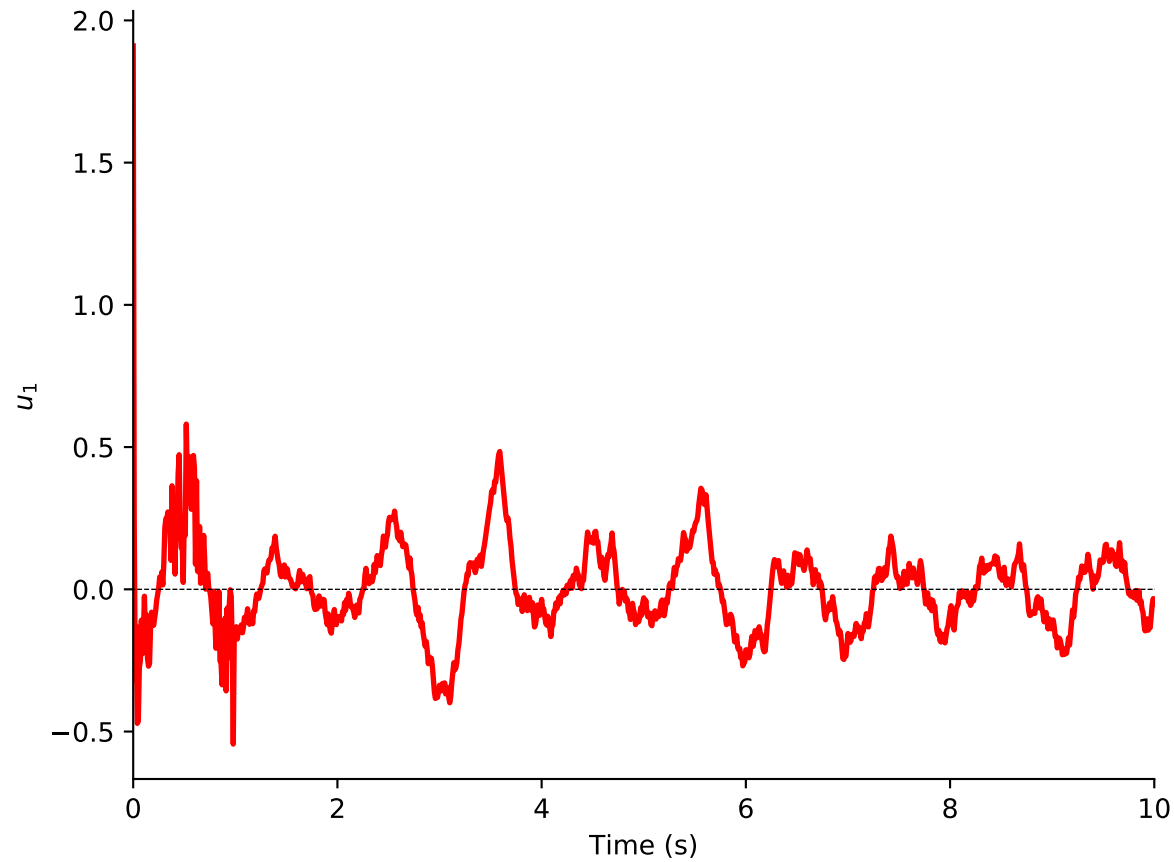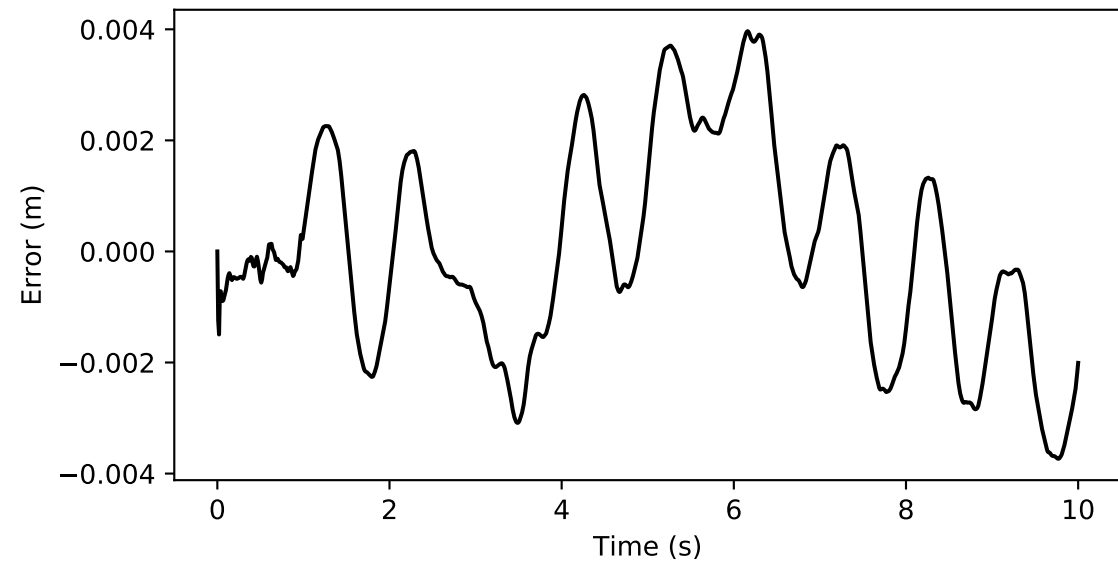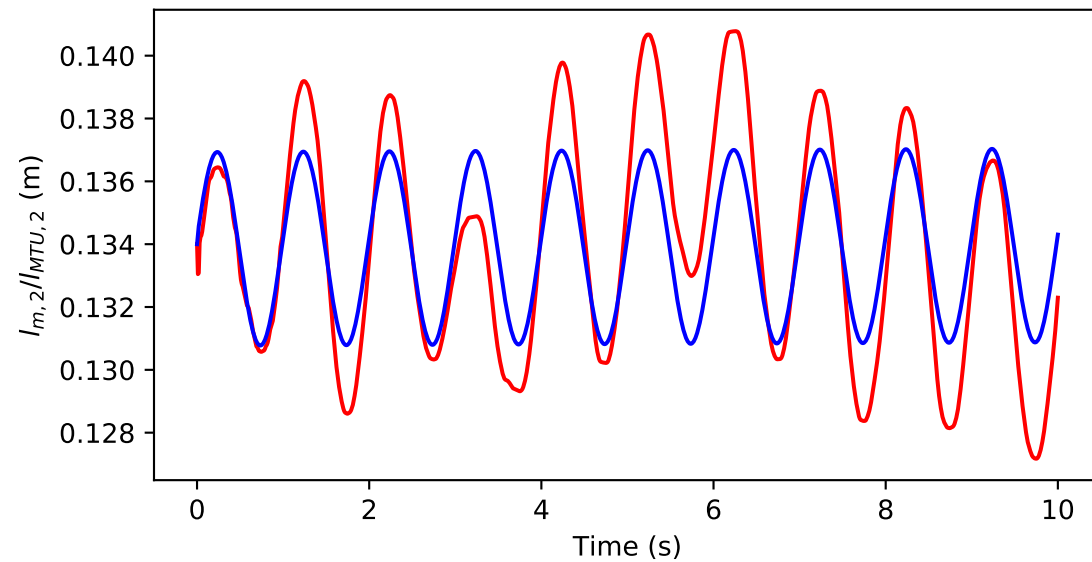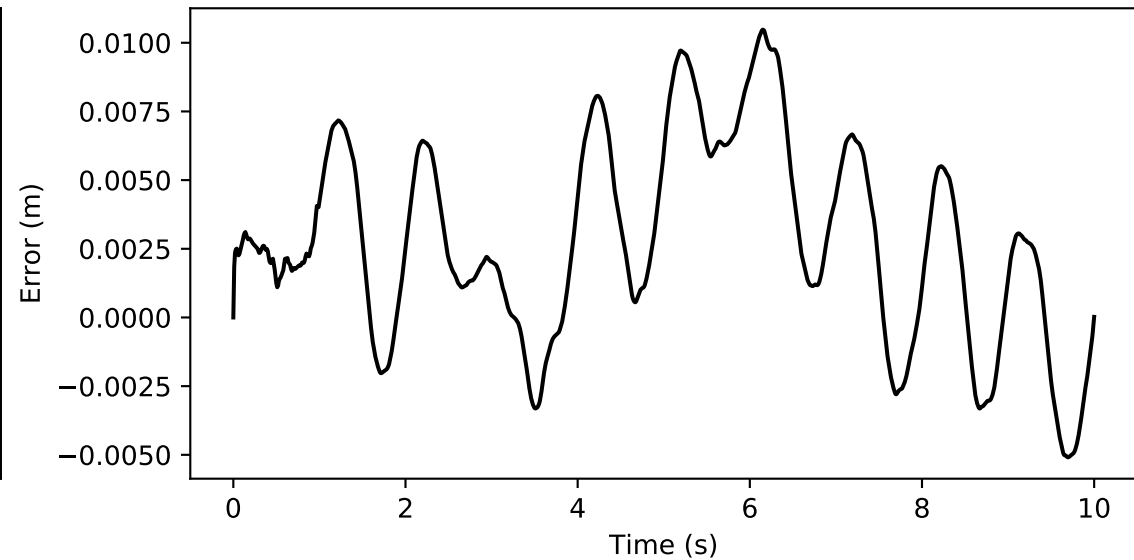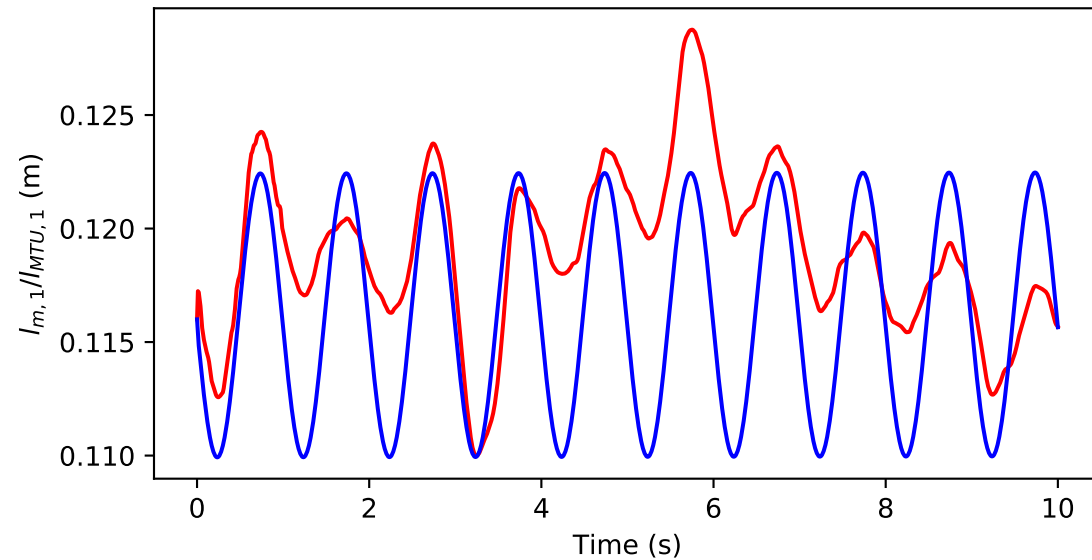Tendon Tension vs. Time
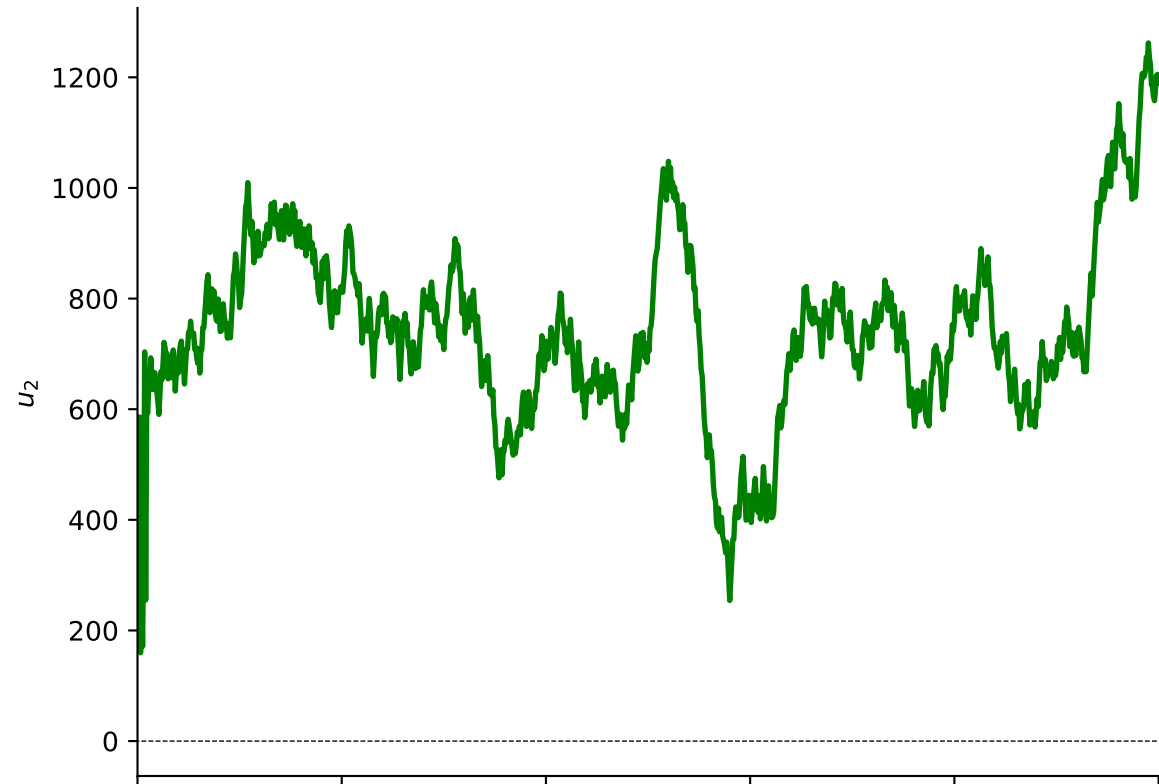
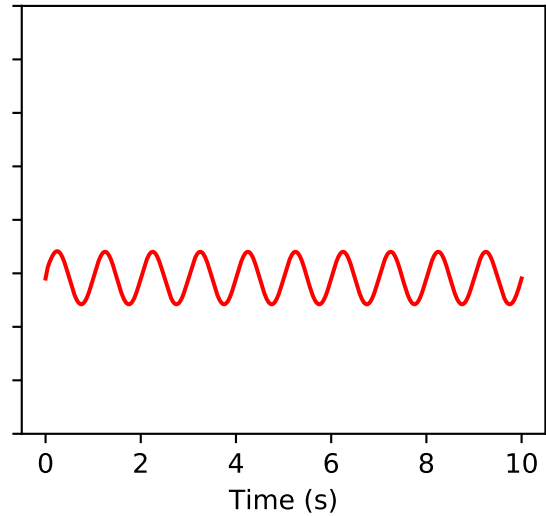Moment arm equations
(Normalized Muscle Velocities Driven)
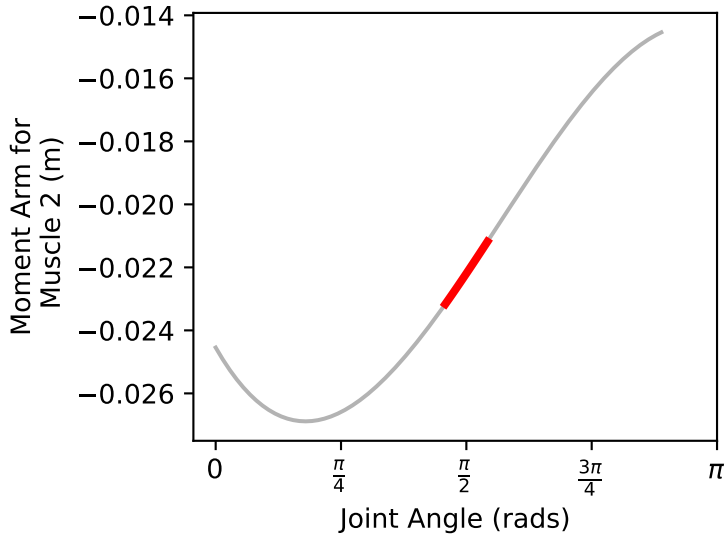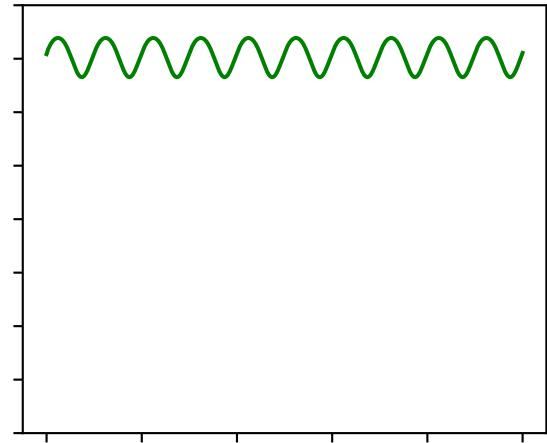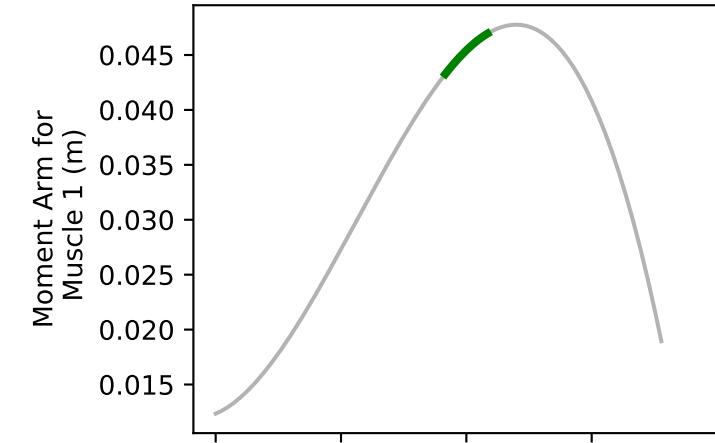
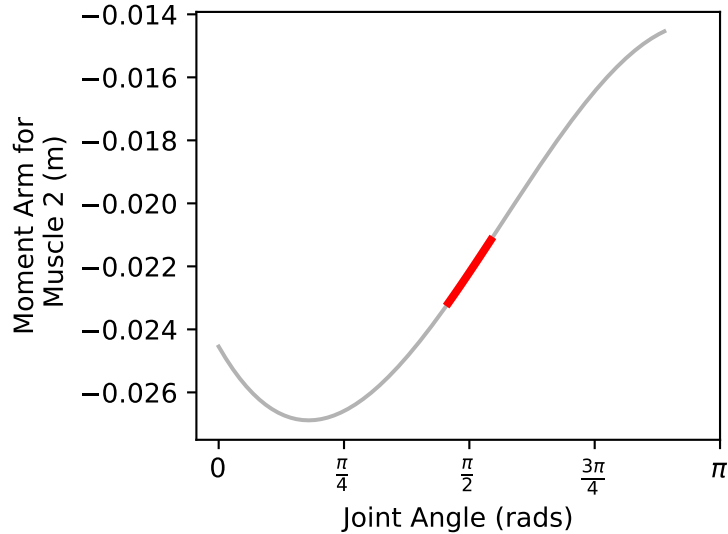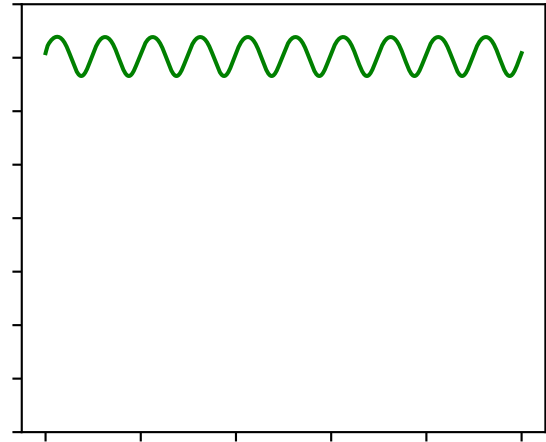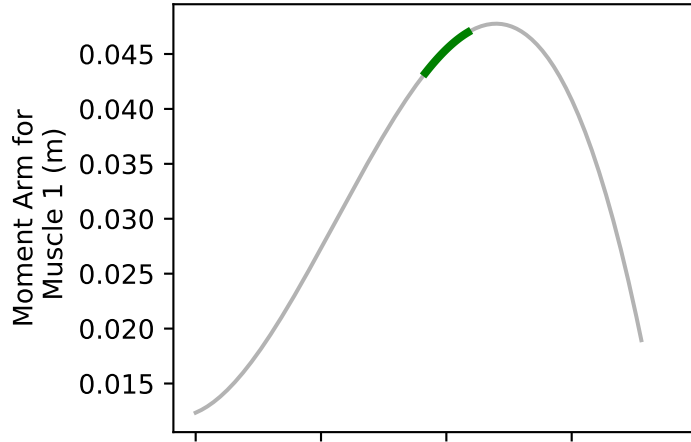Normalized Muscle Velocities Driven
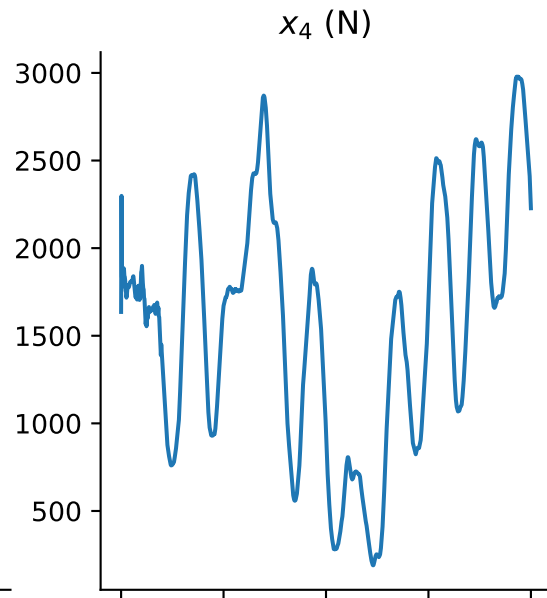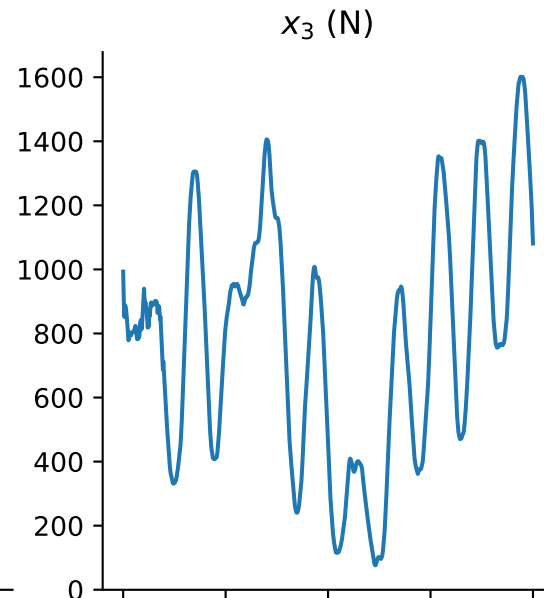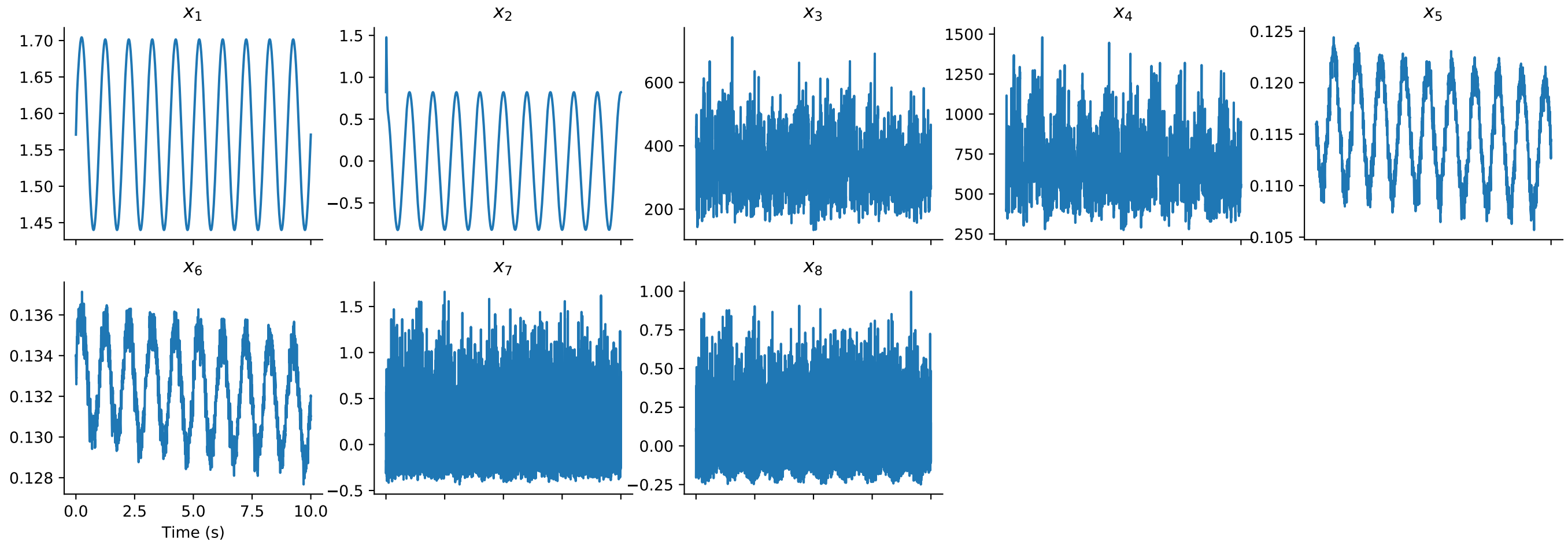
Normalized Muscle Velocities vs. Time

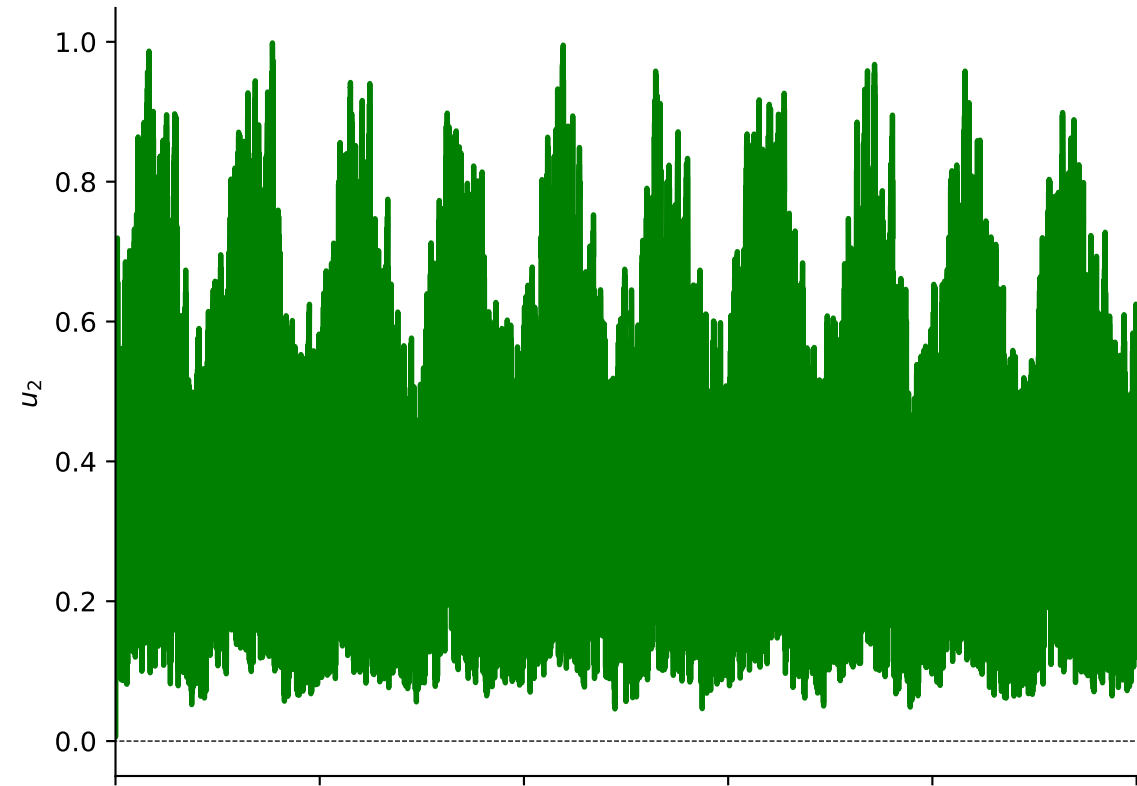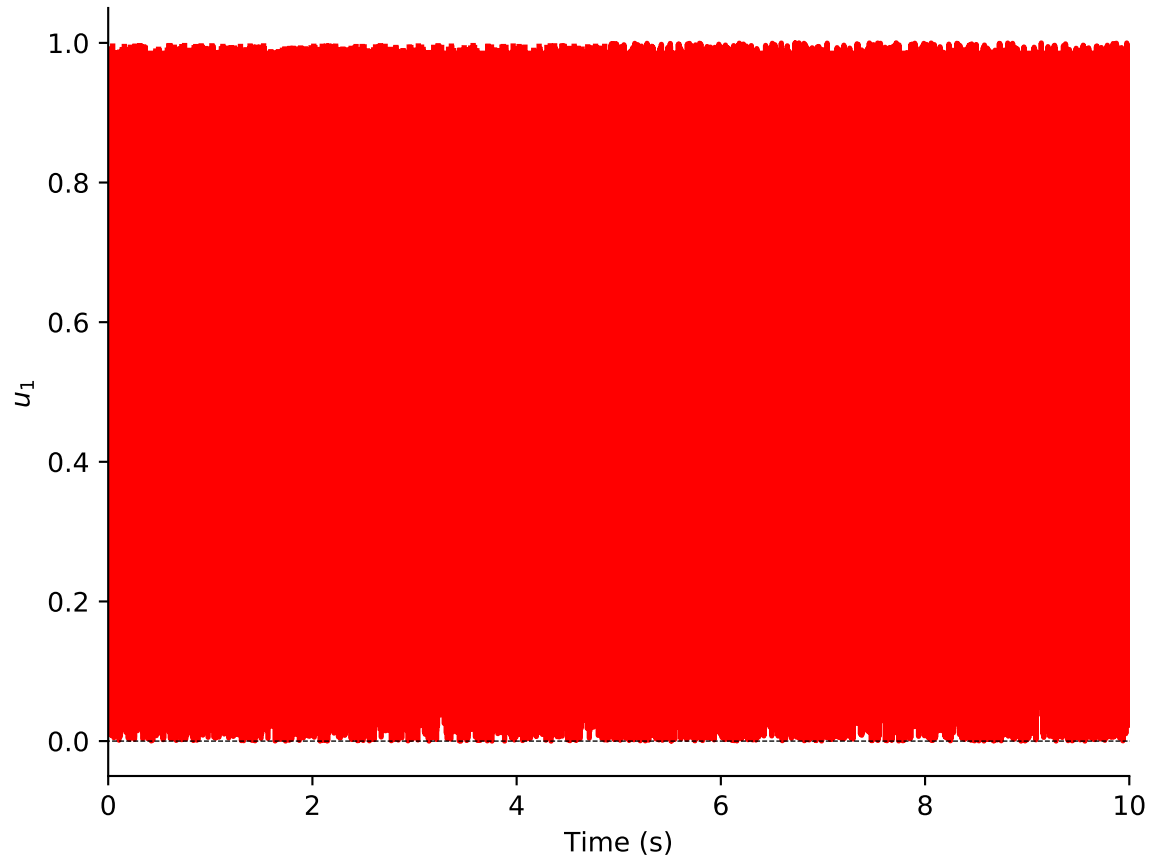Muscle vs. Musculotendon Lengths
Muscle Velocity Driven

**Moment arm equations
(Muscle Activations Driven)**

Muscle Activations Driven

Muscle Activations vs. Time

Muscle vs. Musculotendon Lengths
Muscle Activation Driven