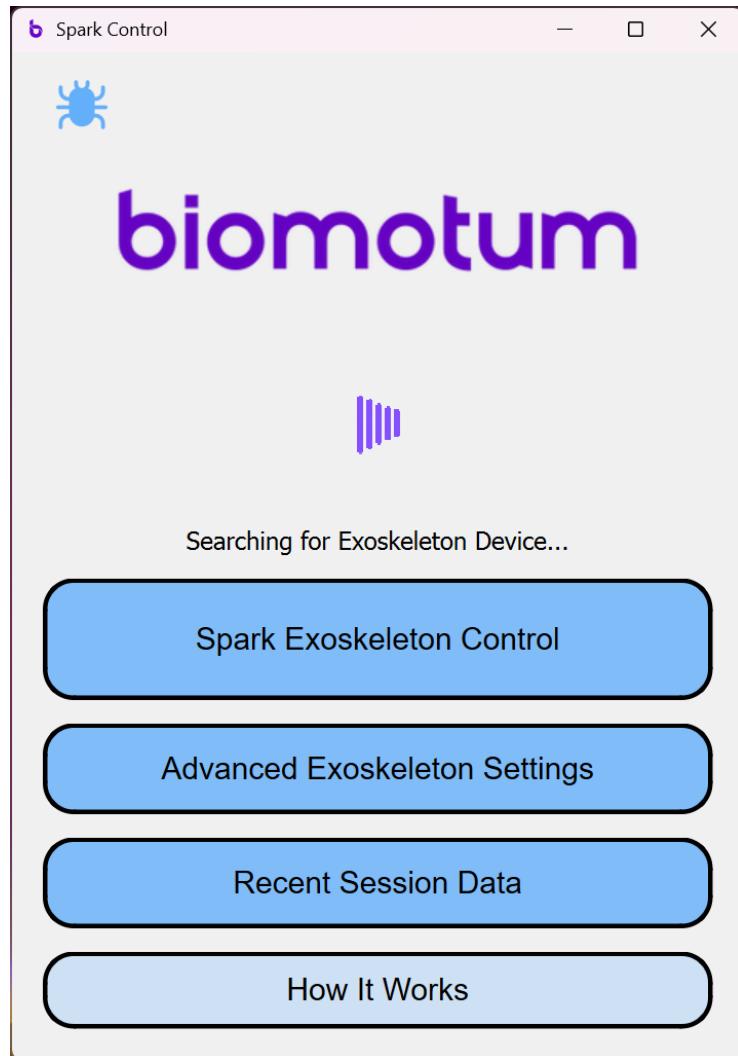


# **Setting up and using the Biomotum Spark**

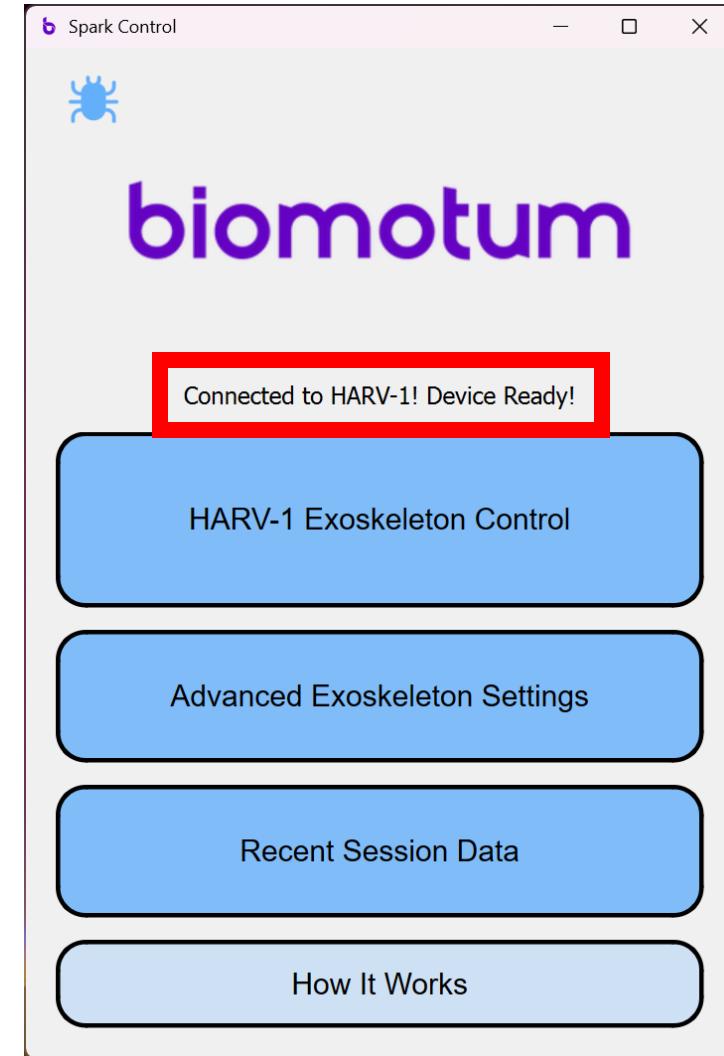
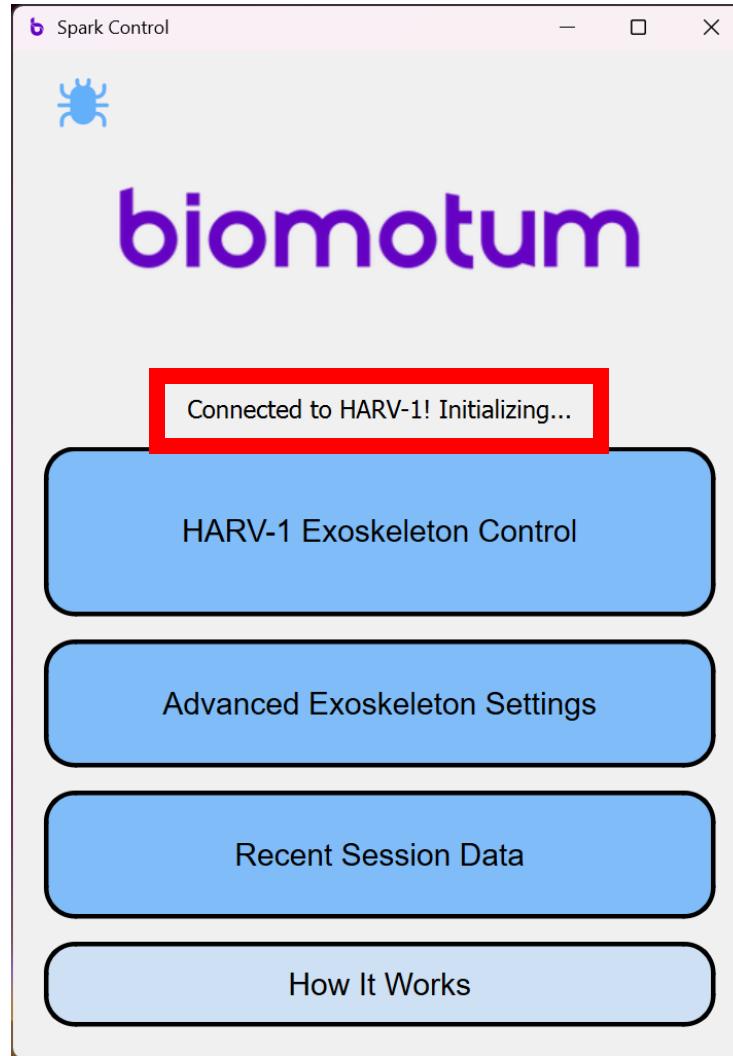
Anway Pimpalkar

**Connect to the Biomotum Spark**

# Connect to the Biomotum Spark

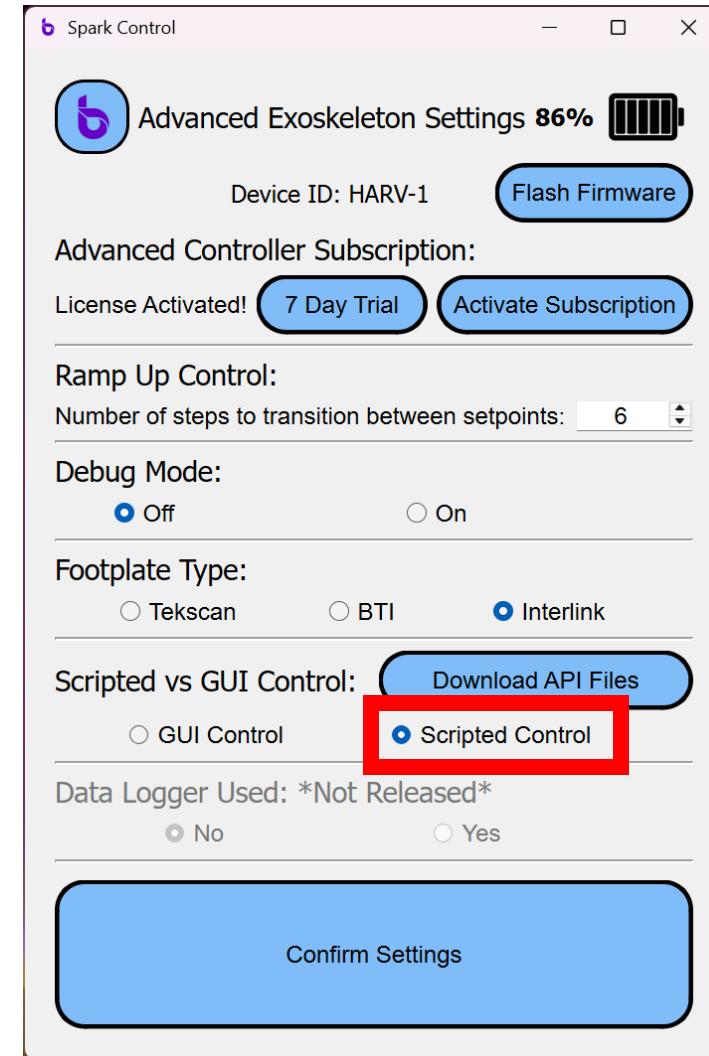
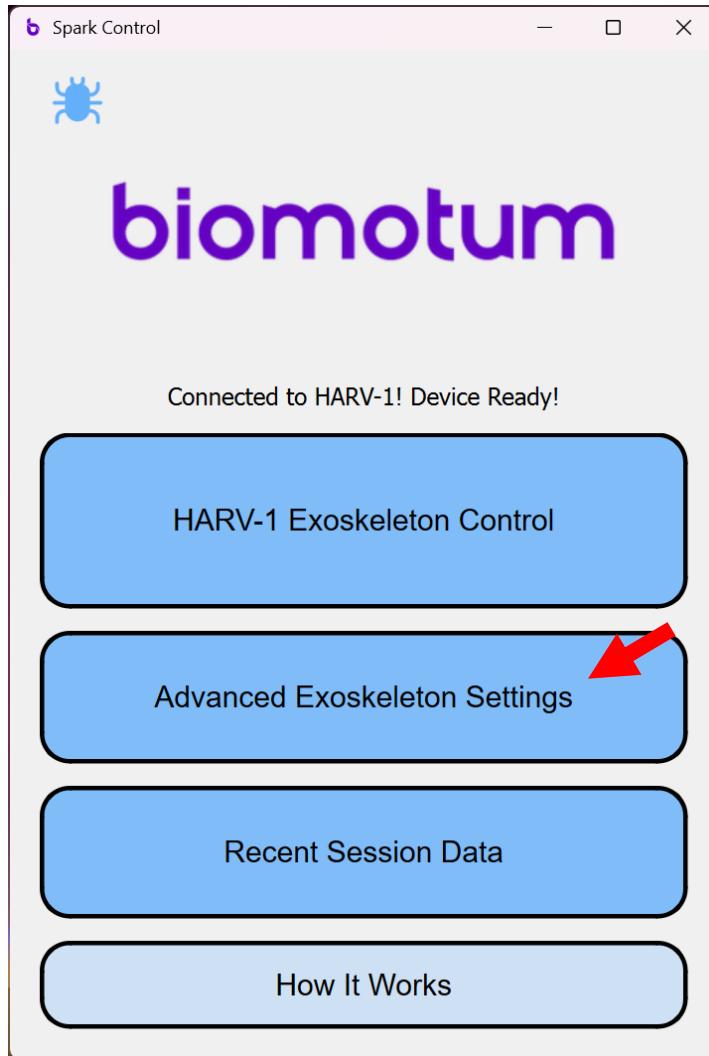


Power on the Spark waist unit  
Turn on Bluetooth on the host



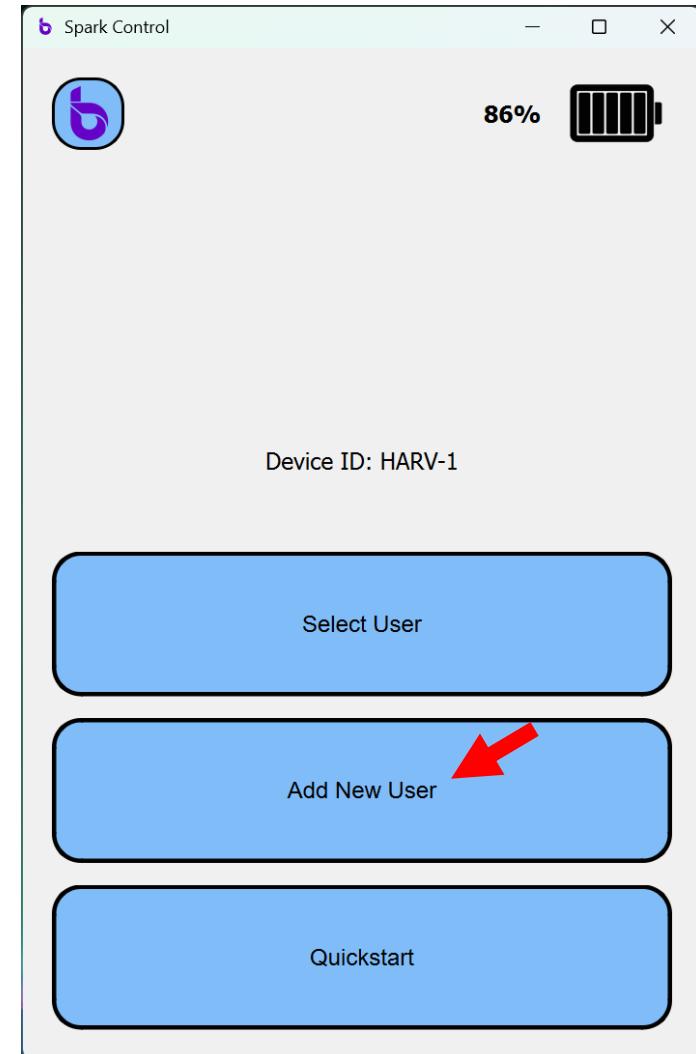
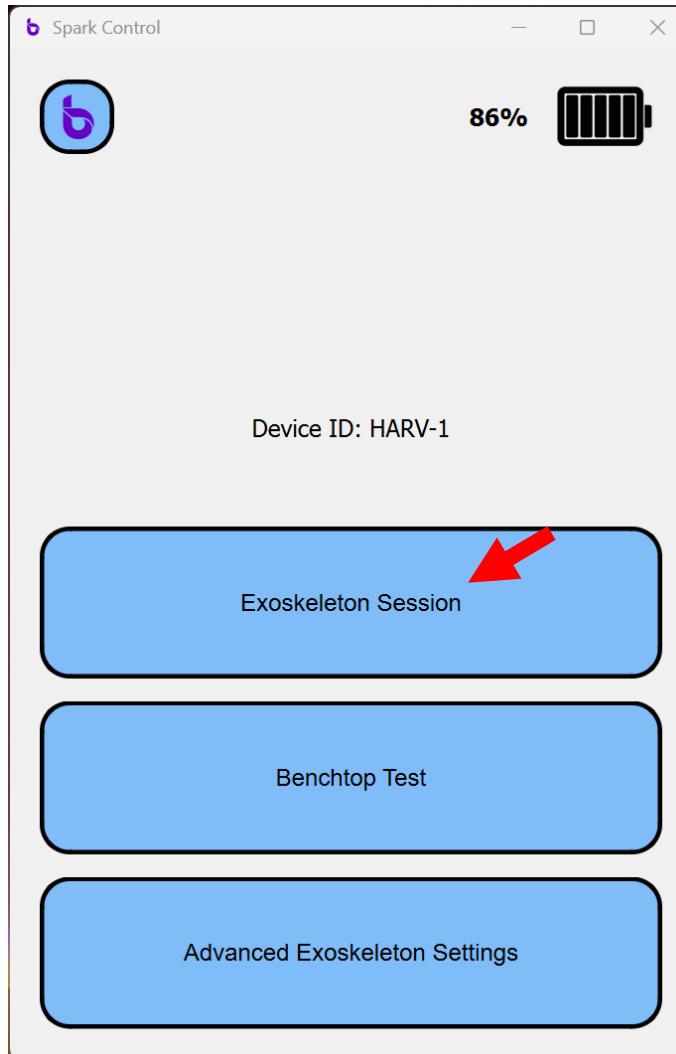
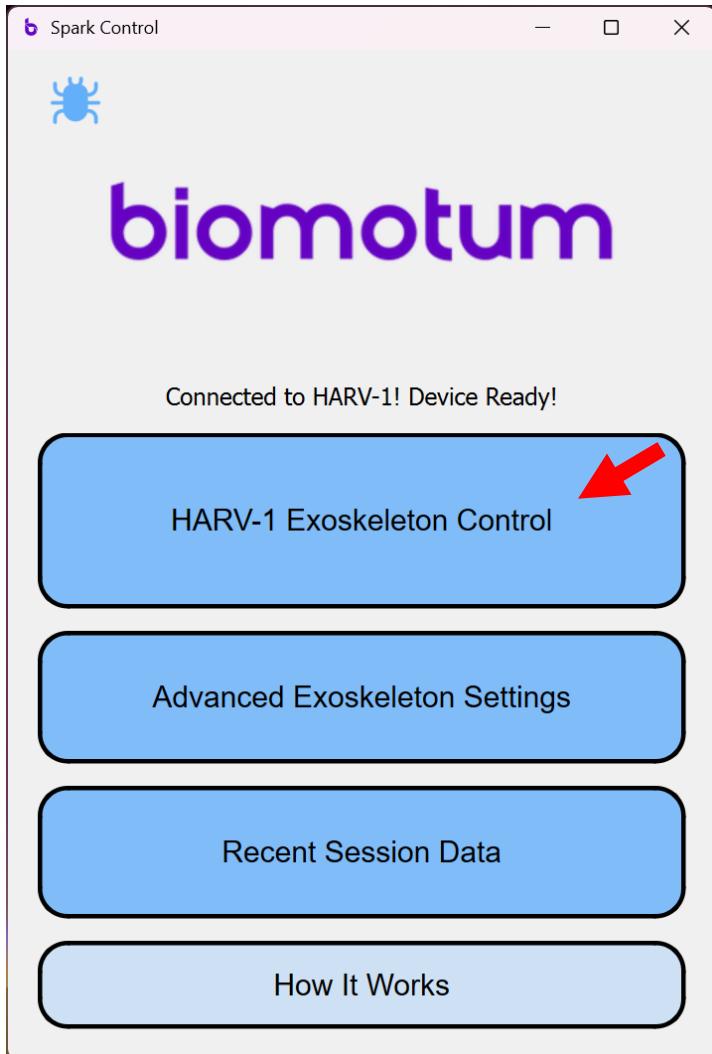
# Enable Scripting Control

# Enable “Scripting Control” to use the Python API



# Add a new user

# Add a new user (1 of 2)



# Add a new user (2 of 2)

The screenshot shows the second step of adding a new user in the Spark Control app. The interface includes fields for Last Name, First Name, Diagnosis, Date of Birth (with a "Select Date of Birth" button), Weight (radio buttons for lbs/kg and a numeric input set to 0), Height (Feet and Inches inputs both set to 0), and Additional Notes. A large blue "Create New User" button at the bottom is highlighted with a red arrow pointing to it.

Spark Control

86%

100%

Last Name:

First Name:

Diagnosis:

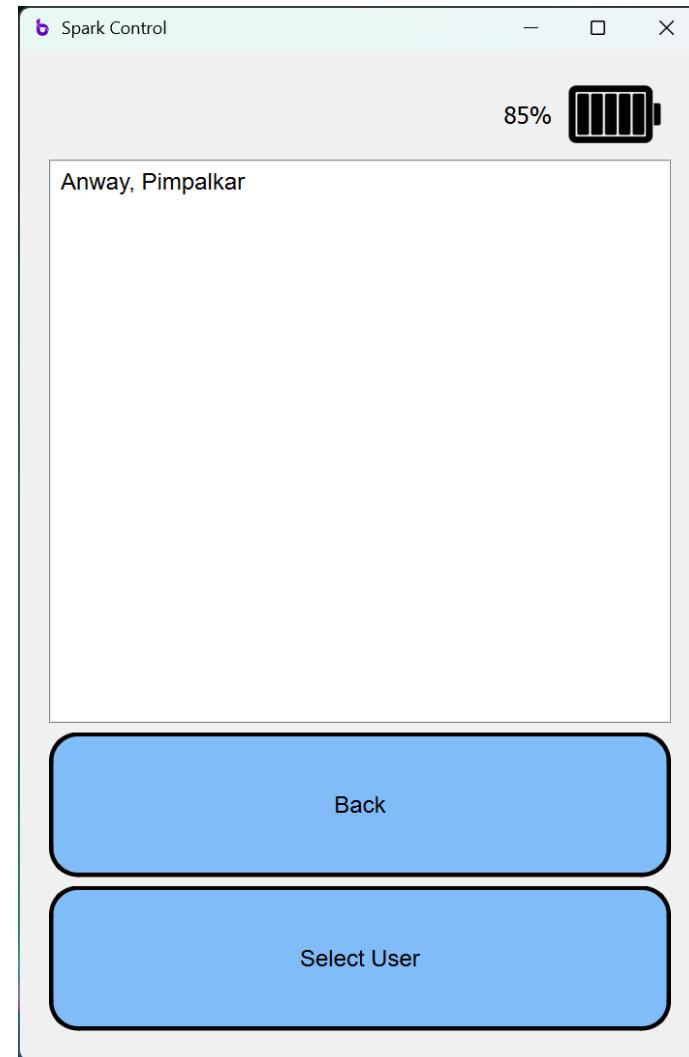
Date of Birth:

Weight:  lbs  kg  
0

Height: 0  
Inches: 0

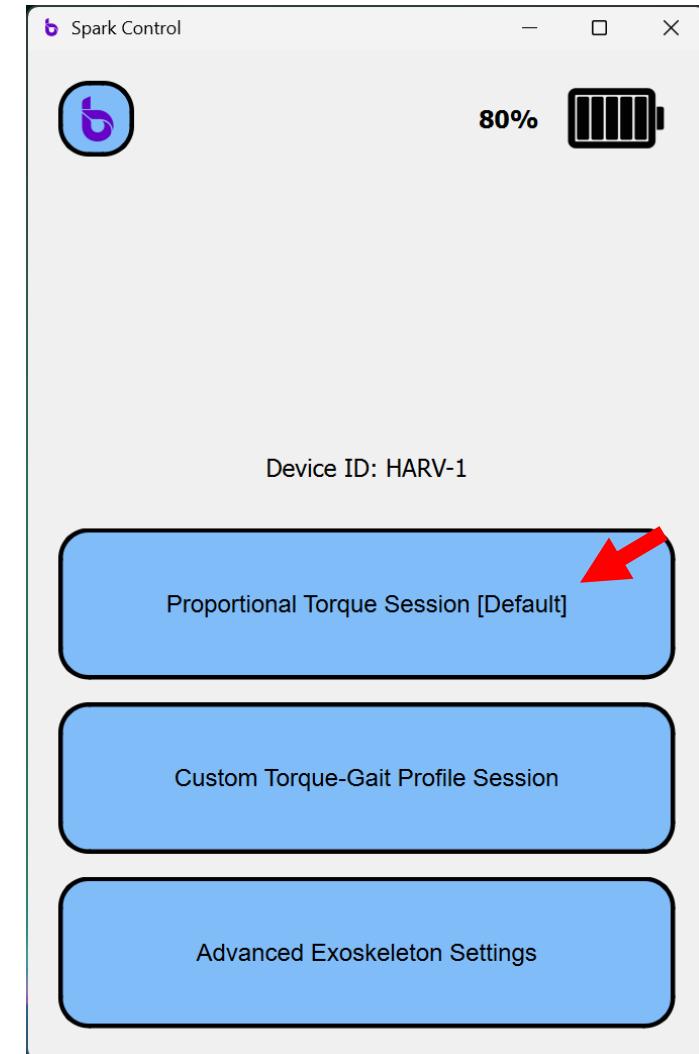
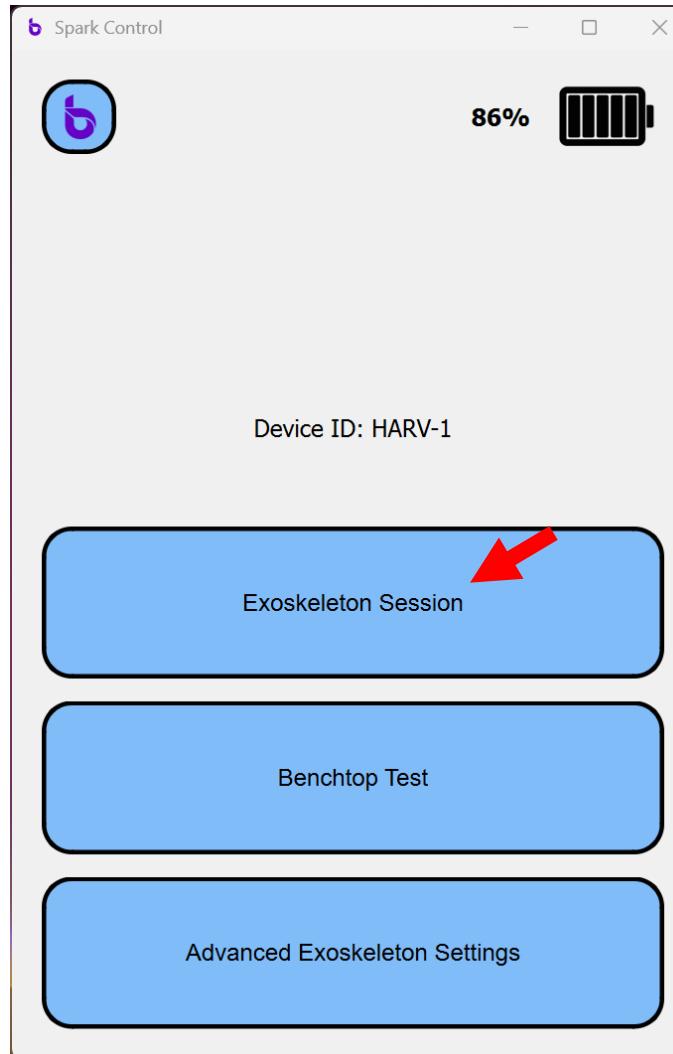
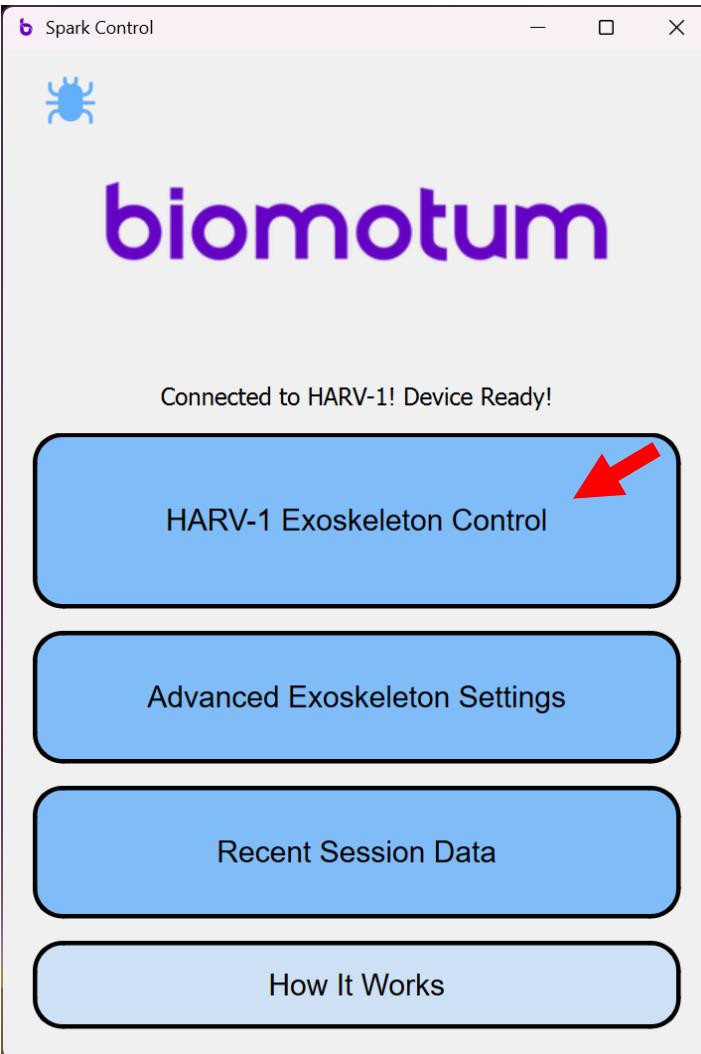
Additional Notes:

Create New User

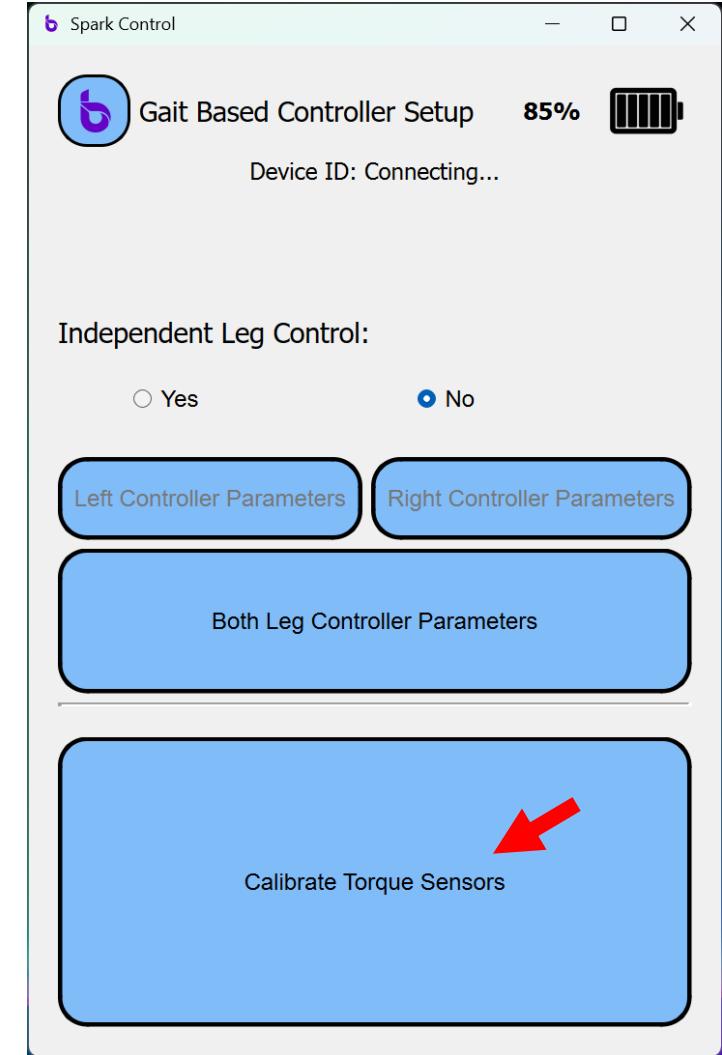
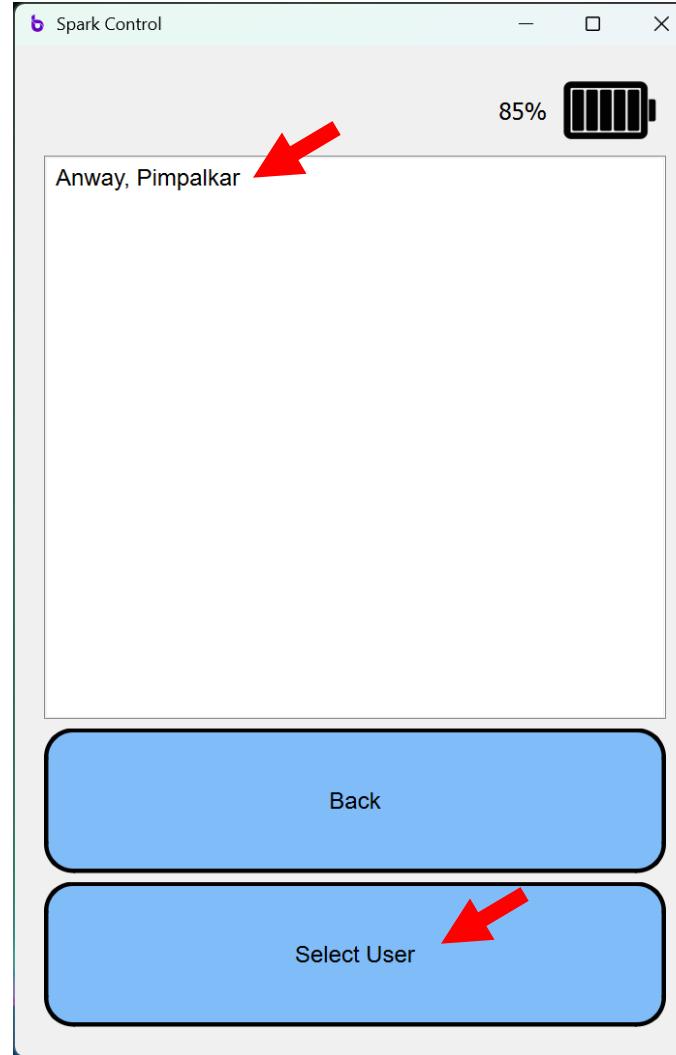
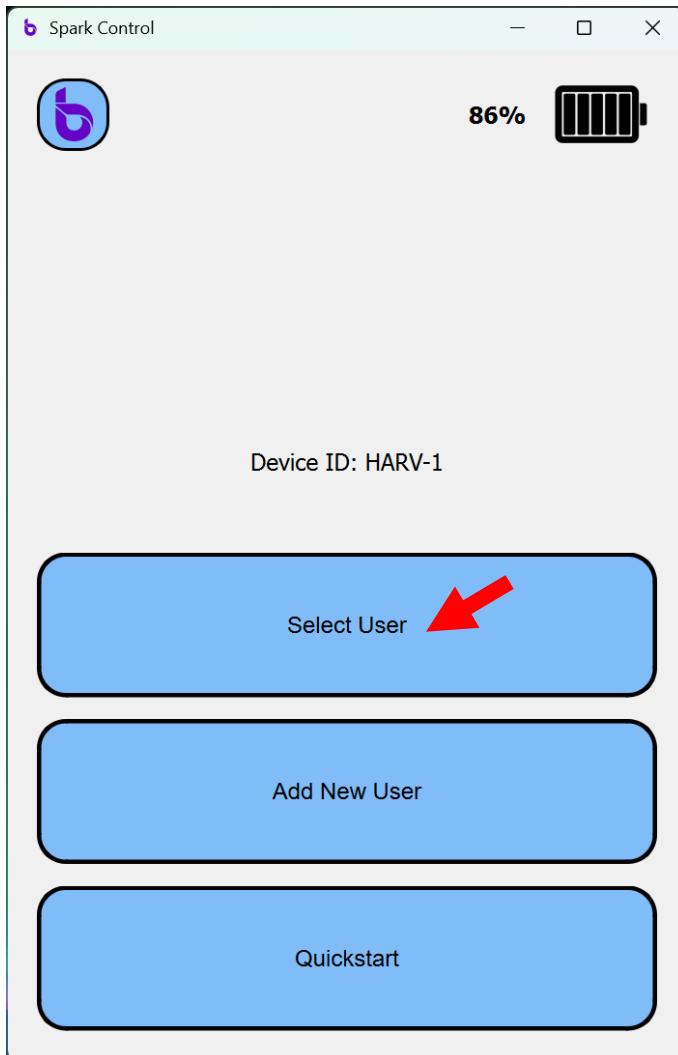


# Starting a proportional control session

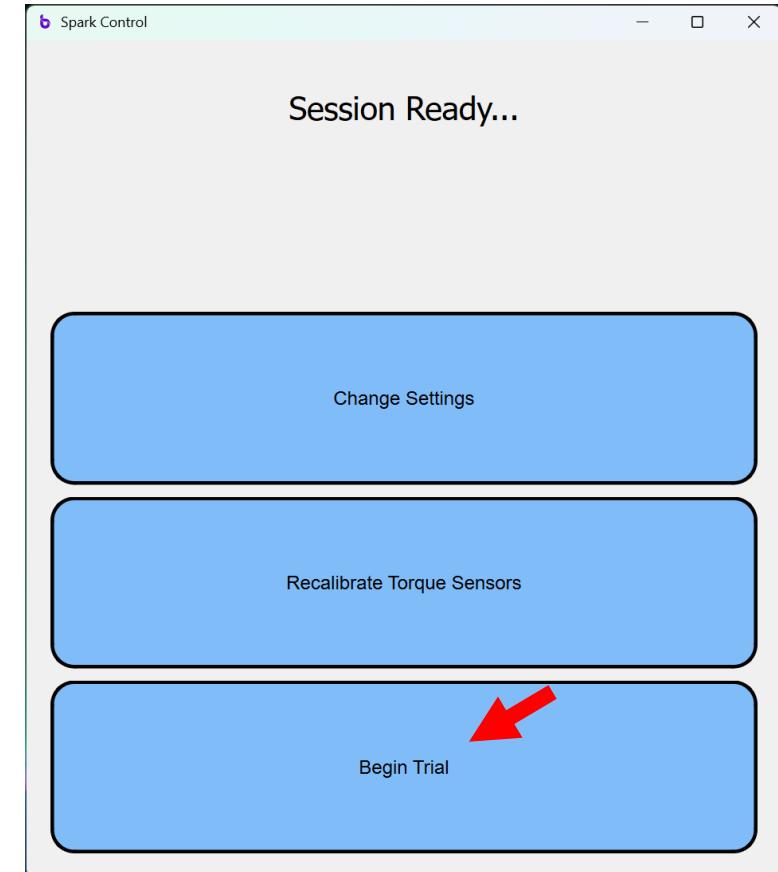
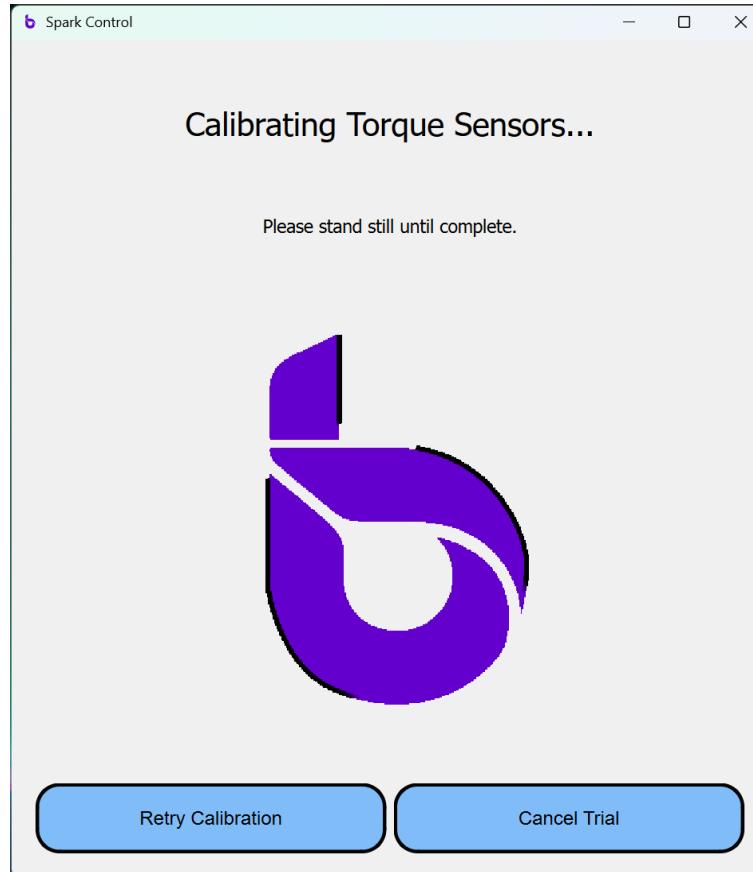
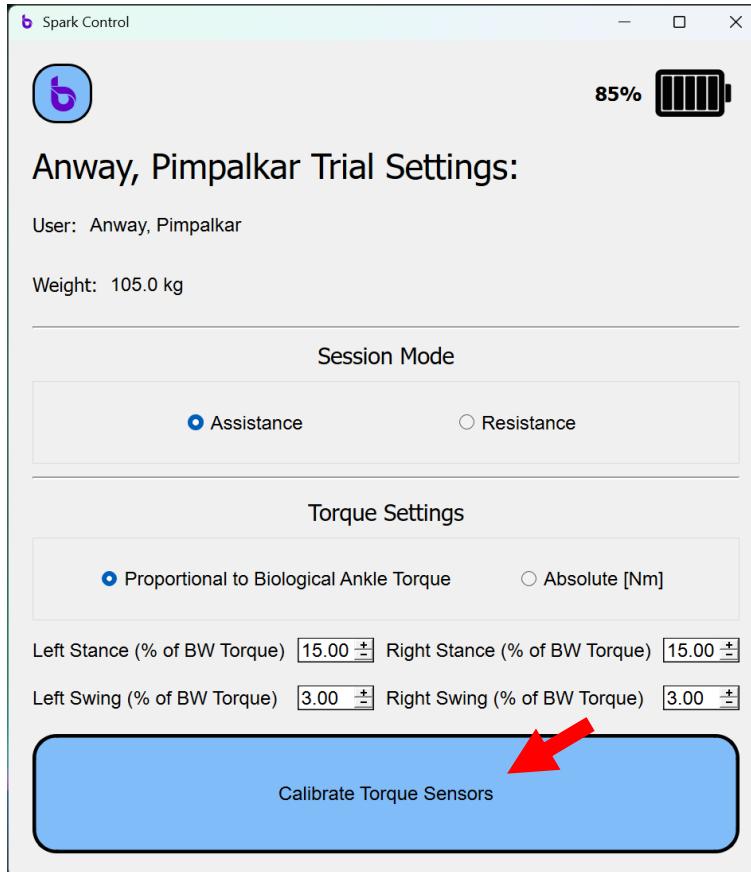
# Starting a gait profile-based session (1 of 4)



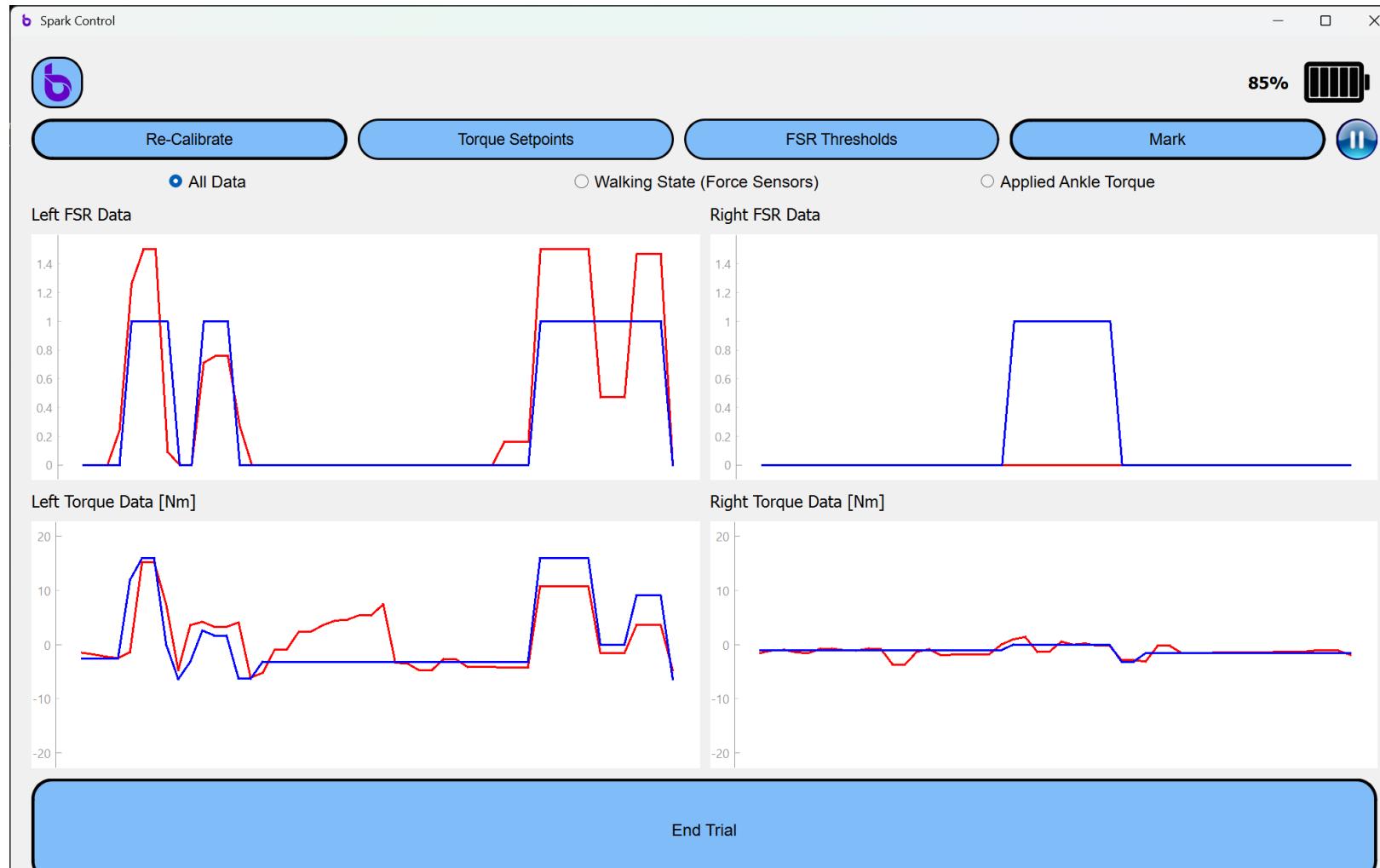
# Starting a proportional control session (2 of 4)



# Starting a proportional control session (3 of 4)



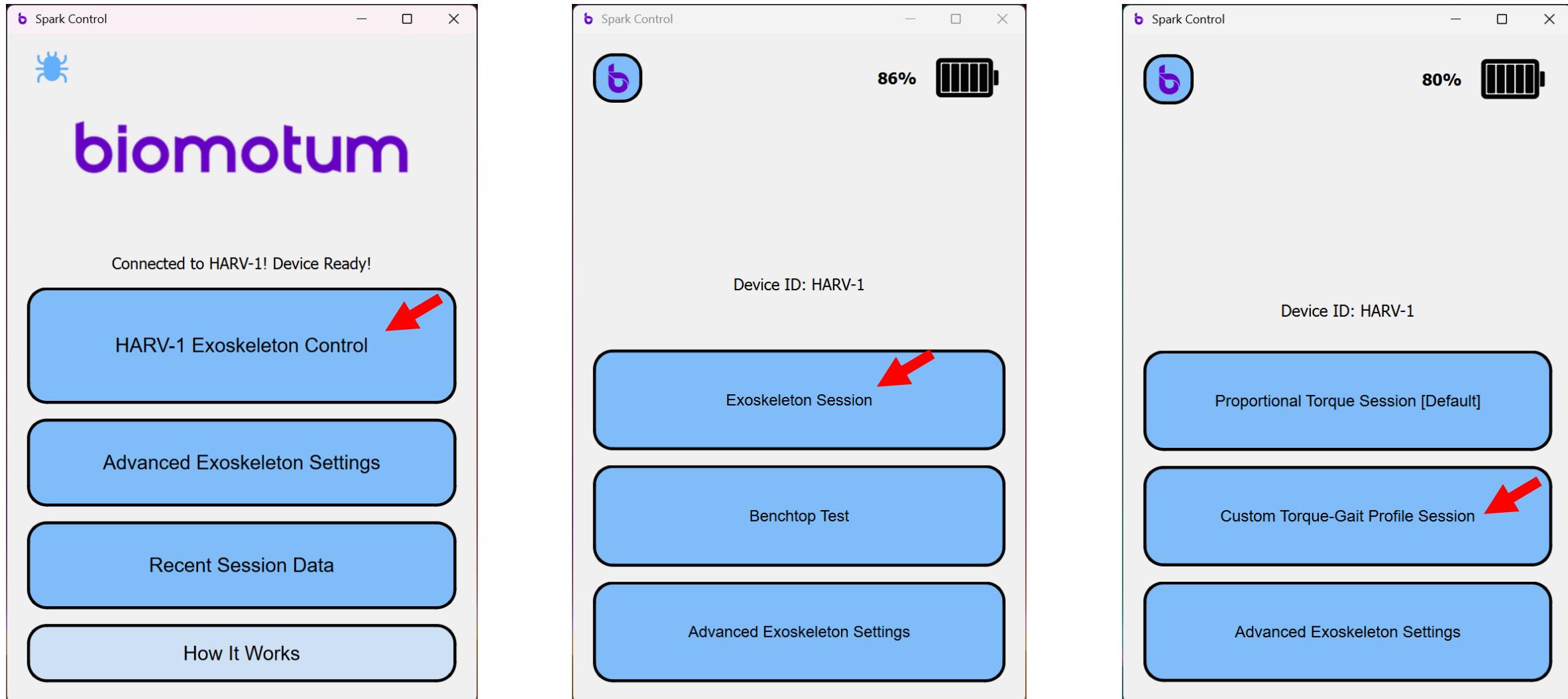
# Starting a proportional control session (4 of 4)



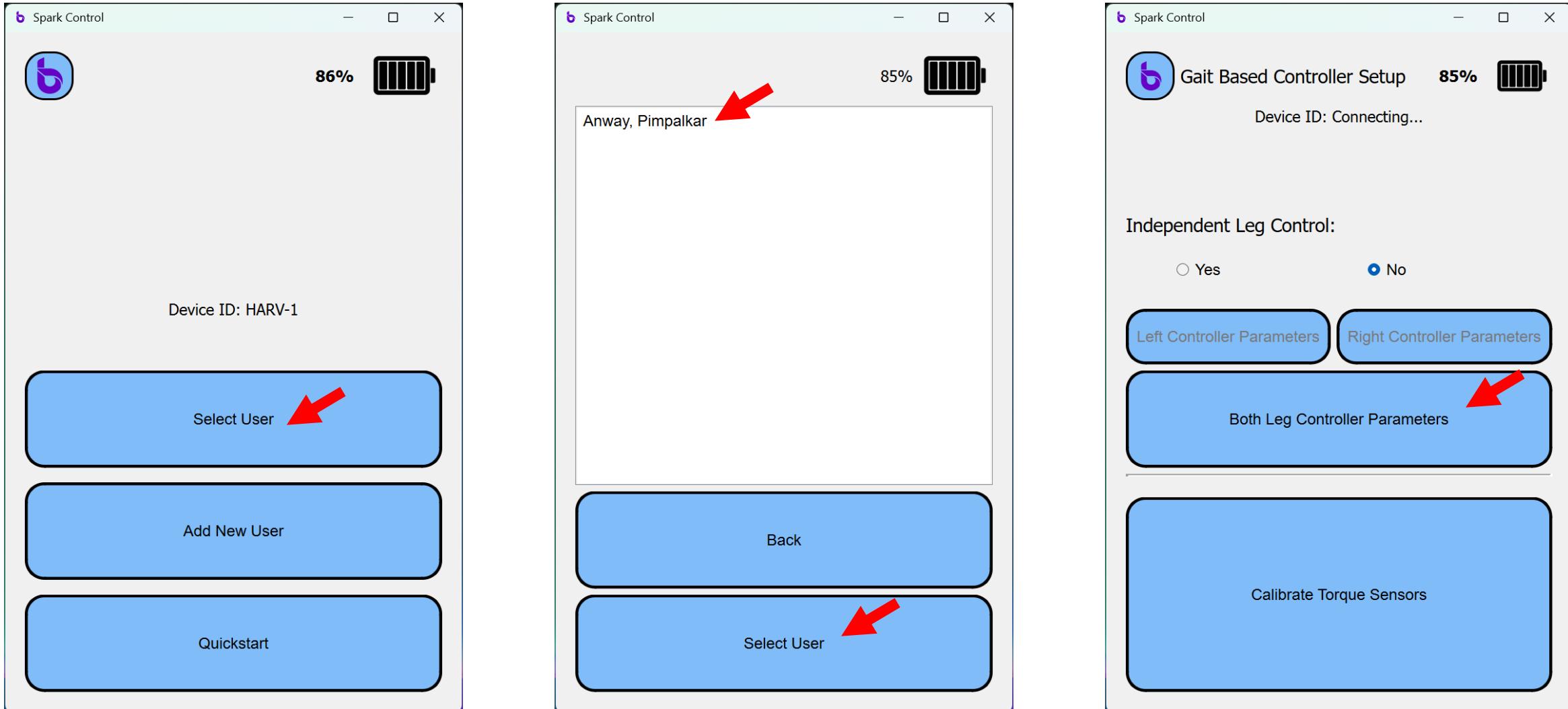
Once the trial has started, you can run your Python Script.

# Starting a gait profile-based session

# Starting a gait profile-based session (1 of 5)



# Starting a gait profile-based session (2 of 5)



# Starting a gait profile-based session (3 of 5)

Spark Control

### Torque - Gait Phase Profile

Profile Name: Default Profile - 4 Points

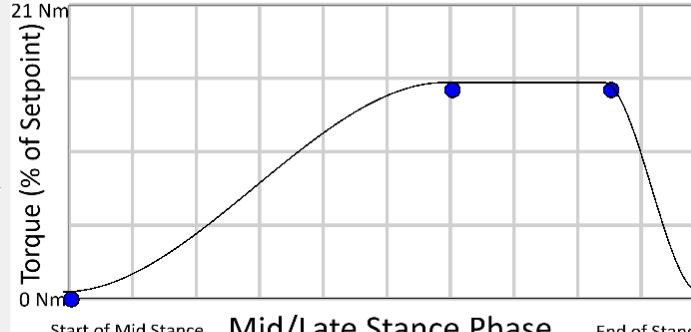
Enable Live Control of Profile

Prevent Inflection Point Valleys and Peaks:

Number of Spline Points: 4

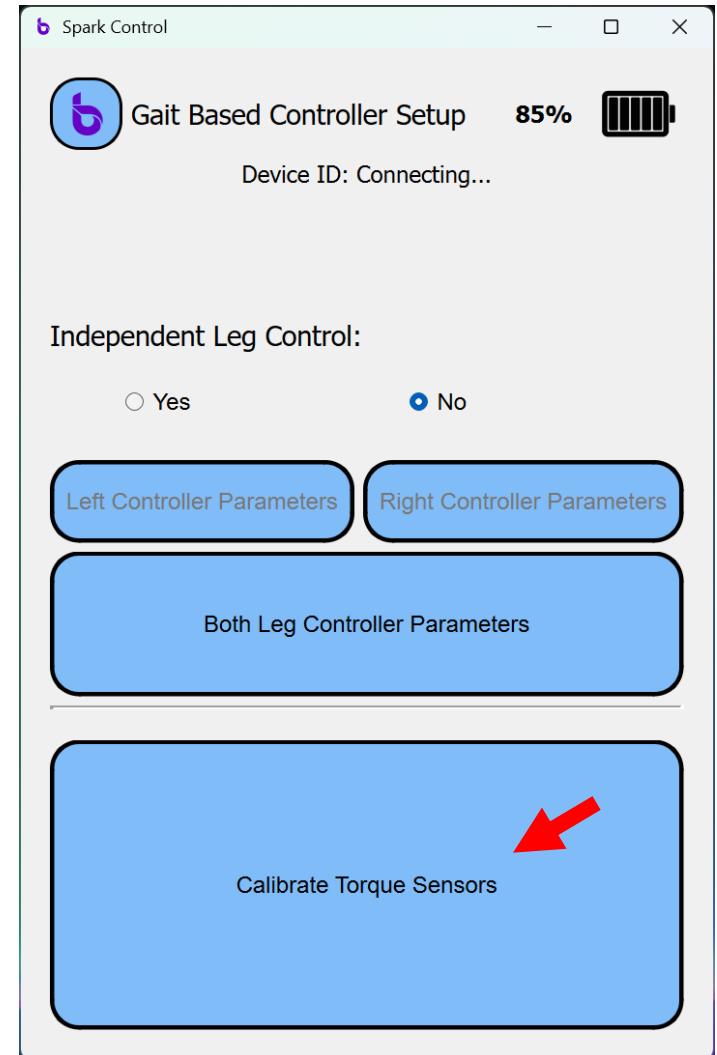
Swing Setpoint [Nm]: 0.00

**Control Point 1:** X: 0.0 Y: 0.0  
**Control Point 2:** X: 60.0 Y: 15.0  
**Control Point 3:** X: 85.0 Y: 15.0  
**Control Point 4:** X: 100.0 Y: 0.0

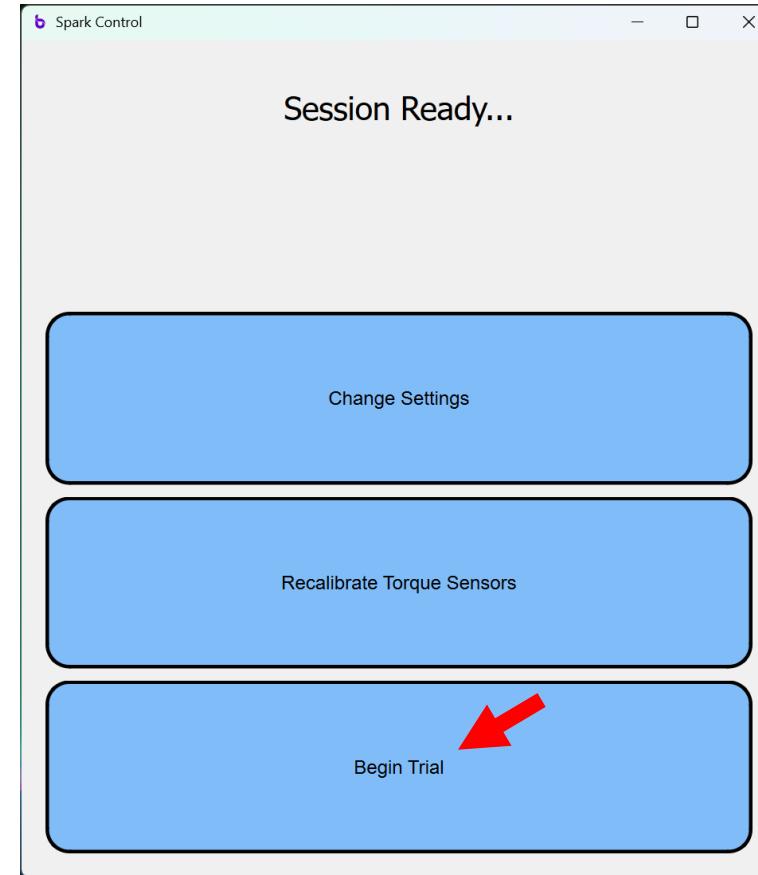
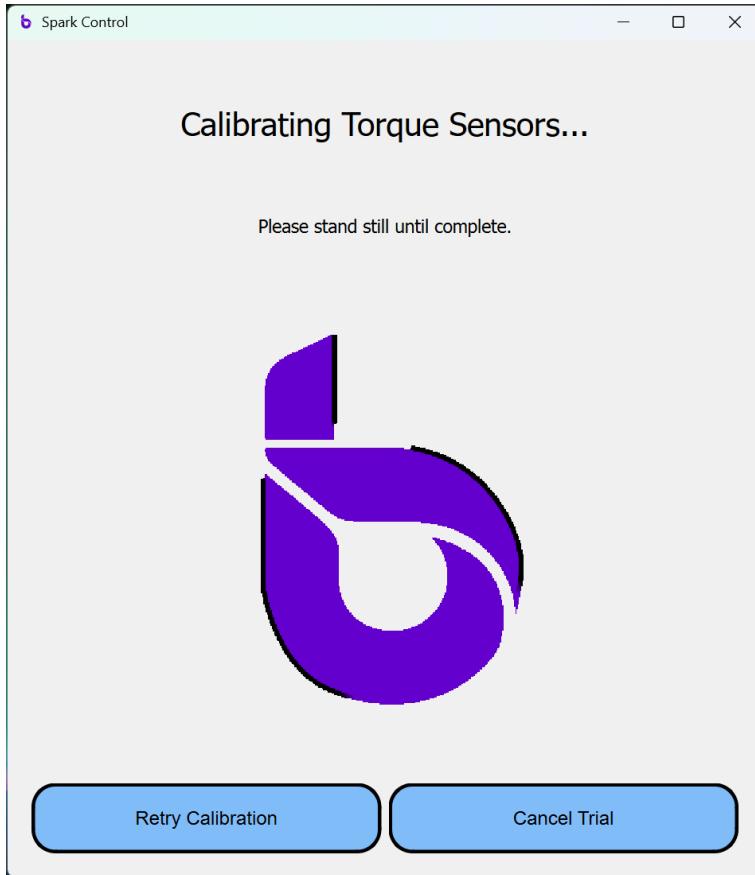


Start of Mid Stance      Mid/Late Stance Phase      End of Stance

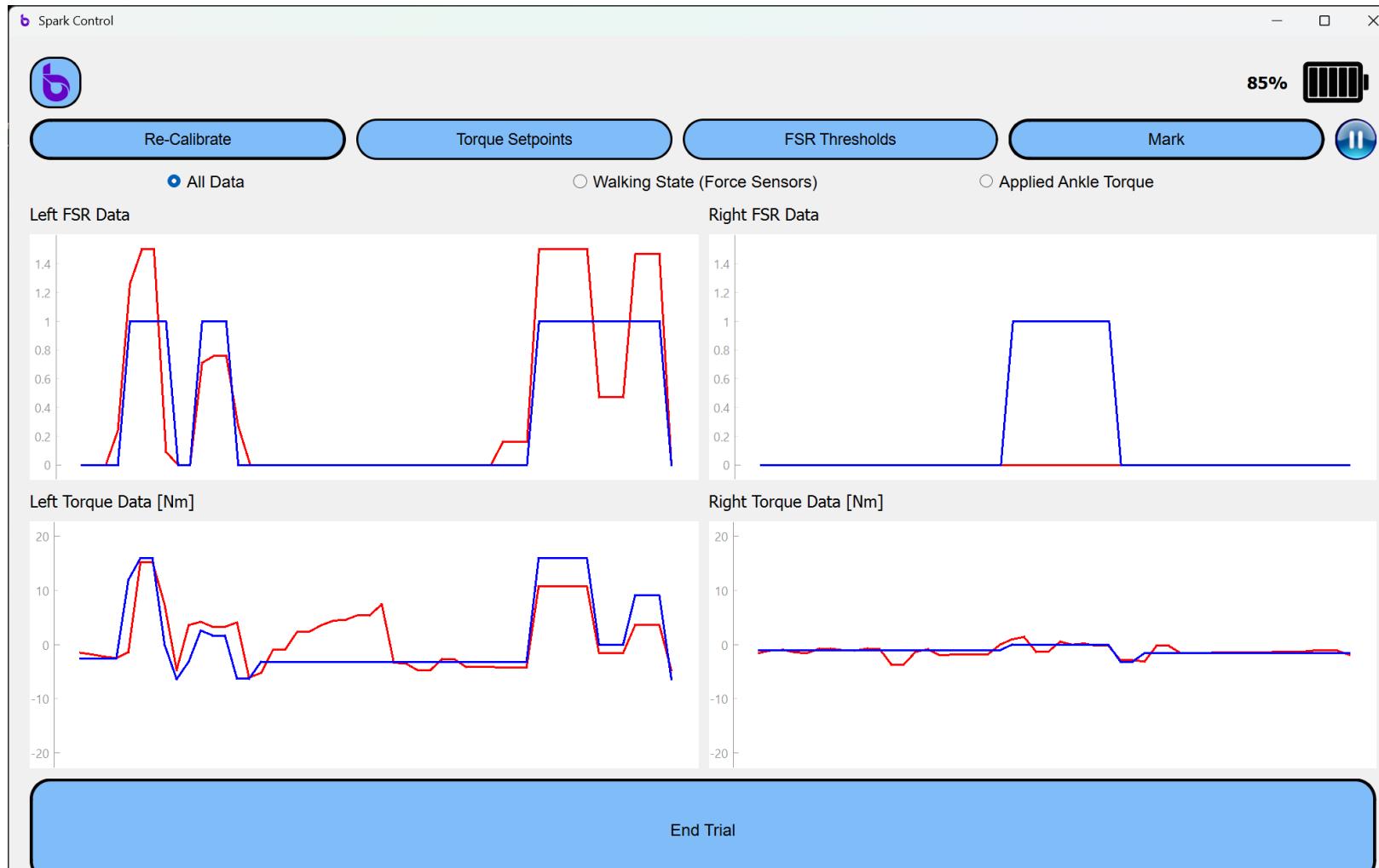
No changes necessary here



# Starting a gait profile-based session (4 of 5)



# Starting a gait profile-based session (5 of 5)



Once the trial has started, you can run your Python Script.

# Saving data as .csv

# Saving data as .csv

