Software Requirements:

Purpose

Develop a LabView interface which interacts with the Simulink code to input/output data. The purpose of the existing code is to provide an accurate measurement of work efficiency, stimulation pulsewidth, power output, cadence, motor contribution, torque, during a FES cycling test, as well as the ability to control the stimulator.

Scope

Current Matlab code provides an interface and automatic loading of parameters to be passed to Simulink files. We wish to develop a similar program with a more streamlined and flexible process in LabView. This may include integrating/converting Simulink code to LabView or another language (C, C++).