

Biomedical Robotics

Data analysis assignment 0

This assignment is intended to help you become familiar with biological data and to refresh basic skills such as generating informative plots and inferring information from data.

Instructions:

1. Load the datasets: data1.mat, data2.mat, and data3.mat.
2. Plot each dataset with appropriate labels on the axes.
3. Based on your plots, try to determine the type of data you are observing: EEG, EMG, or motion data.
4. Roughly estimate the frequency content of each signal (Hint: Plotting the data in time points, rather than samples, might assist you in this task).

Submission requirements:

Submit a single folder named “Assignment0_” followed by your group name (e.g. "Assignment0_G10"). This folder must contain:

1. The Matlab code that loads the data, plots it, and includes your considerations in the form of comments.
2. A figure illustrating the plots.

Additional information:

Sampling frequency of data1: 2000 Hz

Sampling frequency of data2: 166 Hz

Sampling frequency of data3: 250 Hz