Open Ended Lab

Problem Statement: "**Dynamic Model Identification of a DC Motor Position"**

Objective:

Your task is to obtain the dynamic model of a DC motor position using either the **Lab VIEW System Identification Toolkit** or **the MATLAB System Identification Toolbox**. Subsequently, validate the model and determine the Mean Squared Error (MSE) and Root Mean Squared Error (RMSE) values.

Report Requirements: Your report should include:

1) **Experimental Data:** Detailed data collected from the DC motor system, including position and corresponding control inputs.

2) **Model Selection:** Explanation of the chosen model structure and order.

3) **Model Validation:** Validation process of the identified model against experimental data, along with calculated MSE and RMSE values.

Ensure clarity and conciseness in your report.

Due Date: 15/5/2024