Progress Report 1

Project Title

Transmission Control System Design using CRIO Real Time Controller: Data Gathering and Actuator Control

Team Members

Group 35

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Supervisors

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Associate Chair - Operations

Group Meetings with Advisor

There were no direct meetings held with our supervisor during this period. However, email correspondence was used to track progress and determine the next step of our work.

Project Readings

There were no readings identified this week.

Recent Progress

Since the previous progress report, a data-logging module was implemented using one of the available Arduinos. The data-logging module was connected to the same CAN bus as the other modules, and their interoperability was verified.
As the force sensor was not yet available to us, a simple template of the data gathering module associated to it was created. The appropriate handling of data format was foreseen.

Future Plans

During this next period, we plan on receiving a force sensor and integrating its analog data into the digital communication network. We also plan to begin working on establishing the connection between the Arduino-based nodes and the CompactRIO based module, depending on its availability.

Group Work Report

So far, the Arduino tasks have been evenly split between two team members, Aditya and Alejandro. Since the previous progress report, the third team member, Shayan, contacted the supervisor and has been assigned tasks he can complete remotely, while working on the same overall project. These tasks are related to the Graphical User Interface (GUI) that will display desired system state parameters.