

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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Associate Chair - Operations

Group Meetings with Advisor

A preliminary group meeting was held on January 12th to establish the strategy for this semester's work.

A meeting was held with our immediate supervisor on January 13th. During the meeting, short-term goals and the meeting schedule for the rest of the semester was discussed. During the meeting, we also received feedback on our final deliverables from last semester. Following this meeting, follow-up meeting was held to check our progress and verify the feasibility of the new goals for this term.

Project Readings

There were no project readings identified since the previous report.

Recent Progress

We continued our previous work on the CAN bus communication between the Arduino and a laptop. This communication work allows us to verify the integrity of the link on the Arduino side. So far, two Arduino units can communicate the contents of a limited-size, statically programmed buffer. More advanced sharing of data will be added as discussed in future plans.

We also added tools for collaborative report writing and source control. These tools will allow us to change the workflow to a more collaborative, end-goal based flow as opposed to last semester's parallel, independent flow.

Future Plans

For the following weeks, the plan is to establish the communication links for the entire system. After testing their integrity and usability, we will develop them to be able to pass meaningful messages with sensor data and possibly response commands. This is the beginning of a closed feedback loop.

Group Work Report

So far, the work has been adequately and fairly shared between two team members, Aditya and Alejandro. The third team member, Shayan Ahmad, has not been present since the beginning of the term. We two are still awaiting an official notice of his plans for the semester. The supervisor has been made aware of the situation. At the moment of writing this report, he has not made any contributions to the work.