**Microprocessor Systems Lab 7**

Contoller Area Network (CAN)

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**Introduction**

* Basic intro to the lab. What the goal is, what the lab aims to teach, hint at some of the details (for example, what a CAN is and where it’s used, like cars and stuff).

**Procedure**

* Explains what we did in the lab in detail. Mention what we modified in labview and how we modified it, the addressing scheme of each sensor and how we used that for both labview and the other parts of the lab.
* How we approached the transmitter and receiver code design, including pertinent details such as the ADC, DAC, PWM, etc.

**Challenges and Results**

* Any main problems (aka challenges) will go here. Off the top of my head:
  + Byte order for motor and turning control
  + What data the motor takes as input (our confusion with the greyed-out section)
  + How to request data from the sensors
  + Random bit error when testing the turn signals (however this was not reproduced when tested again)
  + PWM problems to the temperature meter
* What our results were, what did and didn’t work, how we solved the stated problems, etc.
* Like the procedure, I like to make this section chronological. So I would state any problems and results of the labview part, then the problems and results of the transmit code, and so on rather than stating all the problems of the entire lab first.

**Future Improvements**

* What we could do in the future to improve the lab or our procedure, possible extensions to the lab.
* What would make the lab better for students (how could it be restructured, what could be made more clear, what could be added or taken away, could this be a final project instead, etc)
  + I think Kraft would like this section

**Conclusion**

* Quick summary of what was stated in the paper - what was learned in the lab, an overview of the problems faced, and what was or was not accomplished.

**Appendix A: Circuit Schematic**

**Appendix B: Code**