

# MIE438 – Microprocessors and Embedded Microcontrollers

Laboratory Experiment 6

## Deliverable

Spring 2018

Department of Mechanical and Industrial Engineering

University of Toronto

Notes:

Practical Section:

Last Name, First Name	Student Number

1. Record your code changes here. (The changed codes only)

2. What happens to the buzzer when your hand is near the cross-over point? What is happening in our A/D conversion process / program code, and why (i.e., what does the sound you hear represent)?

3. Monostable code listing (**just the code with the 'for' loop is sufficient**).

4. Has this solution resolved the issue found in Question 2, or has it merely reduced its effect? Speculate what situation or problem would this solution be more useful for.

5. Hysteresis code listing:

6. Why did adding hysteresis solve this problem? From the lecture, what other solutions might have worked?

This lab hand-in is due at the start of the subsequent lab section.