

Minutes

Location: School of Computing Common Room

Date: Thursday 23rd November

Not In Attendance: Daniel Knox

Attendance: Daniel Carl Beauchamp, Dharius Robinson, Natalie McLaren

What's Been Done since the Previous Meeting:

- **Change of processor:**
 - Connected our sensor plus the SD Card to the adalogger (as opposed to arduino uno) to get it writing actual values
 - Wrote/read to/from the SD Card using the adalogger
 - Included an interrupt button press to bring up the engineering menu
- **Engineering menu:**
 - Added a step in the menu to check for info on the SD Card
 - Added a step in the menu to change measurement period

Topics discussed:

- Error checking

What was done:

- **Testing:**
 - Using a tape measurer, we tested moving towards/away from an object. We found that it was very off so we instead testing having an object (Dharius holding a wooden square) moving towards it.
 - We found that:
 - The sensor can't be directly against a surface - needs a gap.
 - The sensor is accurate to +/- 3mm
 - When testing for 5m - it was off by 70-90mm. However we achieved more accurateness when testing with 4.5m.
 - Max range of about 4.9m because of the plastic casing
- **Average of measurements:**
 - Coded functionality to take the average of last 3 readings

What is being done:

Error checking

Further Discussion:

