

Staff Meeting

March 8, 2018

Executive Summary: The NRL Arch team discusses minor changes to device chassis and gives a general progress report of the NRL Arch's construction. Dr. Trevas announces upcoming presentation.

6:12 pm – Danny explains minor restructuring regarding the base of the device, as proposed by the client, in the name of creating more stability. Jacob gives a progress report regarding his research on translating rotational displacement of wire pegs into tightening of strings on the tabletop of the base of the device; the device which tightens the strings being a screw with threads that tightens the strings as it is being turned.

6:17 pm – Mitchell explains his research re: the encoder's purchase and determining how to convert pulse per revolution to steps per revolution. He also explains his work with the Arduino code to compute ramp speed.

6:20 pm – Zack explains his progress with the accelerometer tests, and states his intention to modify his experimental method by weighing down the ruler and increasing the sample size from $n = 31$ to $n = 500$. He has stated difficulty in exporting data from serial monitor; Dr. Trevas suggests using an SD card shield to have the Arduino write directly to an SD card. Alternatively, Zack could also Google how to tell the Arduino to write the output to a file.

6:28 pm – Dr. Trevas announces presentation due next week explaining the progress of the project; testing procedures, progression, etc.

ACTION ITEMS

Danny will be running FEA analysis on the modified NRL chassis, after which he will be updating the build manual to reflect the change.

Jacob will be assisting Mitchell with encoder research to determine future purchases.

Mitchell will be continuing his work on the encoder and in obtaining motor drivers

Zack will be adjusting his experiment apparatus and running further functionality tests of the accelerometer gyroscope.

