

## Making Progress

Weekly Report 2/26/17 to 3/4/17

After the long search of trying to find a mentor and having to wait for background checks, it was finally time to meet with my mentor, Dr. Choi. I had attempted but failed to meet with him the previous week, instead rescheduling to meet with him this past week. Going into the visit I was eager to see what valuable insights he could provide me with while I could also update him on my final product idea and overall progress in ISM which I had not done for some time. In addition, I also hoped to gain some valuable feedback on my overall project and understand the feasibility of my original work as well as some design suggestions which I could hopefully implement into my revised product proposal before having to submit the final draft on the Friday of this past week. During the visit itself we initially discussed the mentor handbook as every student typically does for their first mentor visit, but we also discussed my final product idea, the costs associated, as well as some challenges which I may face during the process. Dr. Choi and I discussed how I should possibly change my design to a different material as wood is not necessarily the sturdiest, while also recommending the possibility of being able to have material cut at the CNC machine in his lab in order to increase precision. He also mentioned how I should focus on making sure the machine itself is as accurate as possible and eliminate as many human factors as possible such as with cutting the frame with a CNC machine. However, while I did take this advice to heart, I decided to still settle on wood as my frame material as it was cheap and accessible, but I also chose to use MDF or medium-density fiberboard instead of plywood as it was a much sturdier and easier to work with material. Over the weekend, I sketched up some plans for cutting, taped them to my wood, and cut out the parts for the frame.

Over the weekend I also started printing out the printed parts for the 3D printer which I obtained from the Prusa i3 MK2 build guide which I was following for this project idea. During the week I also ordered the parts for my printer, which I hope will arrive in a timely manner in the coming weeks as I continue the construction of my 3D printer.