MOBILE SCARA

PROGRESS REPORT FOR THE MONTH OF SEPTEMBER

TABLE OF CONTENTS

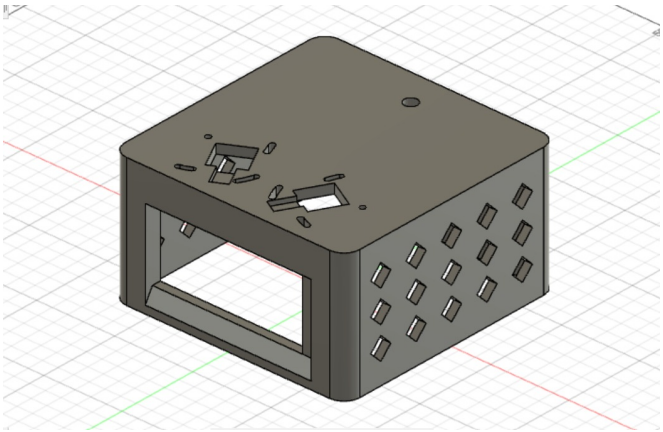
OVERVIEW

Team Members: Bharathi, Pavitra, Ishan, Abhesekh, Aneetha, Anwaya, Ayush, Drishti, Hirthick, Prateeka, Prema, Sarangi, Vinay.

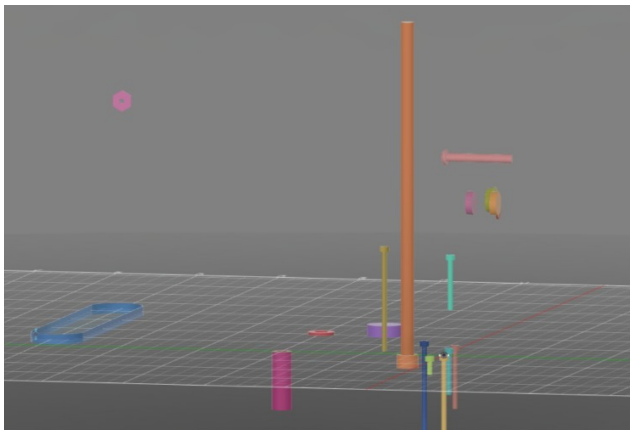
The entirety of the month of September was spent on the beginning of the construction of the RepRap Helios model. Adequate information about its specifications and individual parts were collected, most of it derived from the GitHub page of its original inventor, Nicholas Steward. Moreover, a lot of investigation was conducted to understand the requisite software. The entire team was split into two wherein one team concentrated on understanding the machine learning aspect while the other focused on building the individual parts of the printer.

REVIEW

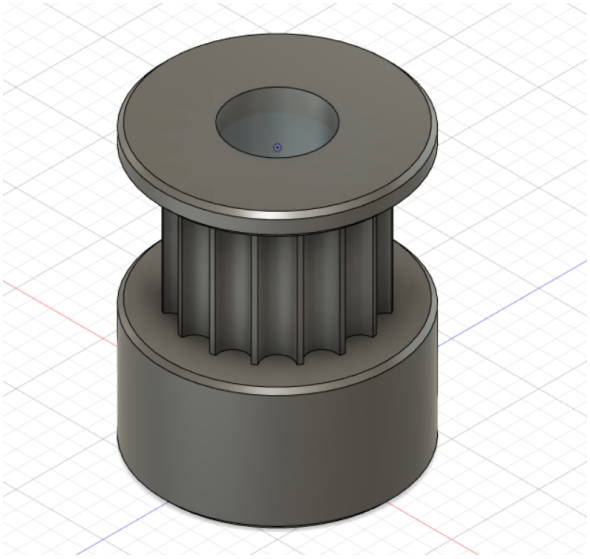
- The team in charge of ML had covered the basics of ML through the course they had taken on Coursera. The team is now currently working on understanding the second concept, which is regression.
- The team in charge of building the model took the individual components from the GitHub page of Nicholas Steward.[1]
- Figures of few parts built:



BOTTOM PLATE



BELT AND RODS



DRIVE PULLEY

OBJECTIVES

COMPLETED DURING THIS MONTH

- All basics from the first ML course were covered.
- All the components of the printer were constructed from scratch in Fusion 360. Reference was taken from the original RepRap Helios components built by Nicholas Seward.

TO BE ACCOMPLISHED IN THE NEXT MONTH

- Ideating on a list of processes that can be employed from slicing to finally 3D printing.

REFERENCES

- **[1] https://github.com/NicholasSeward/proto_RepRap_HELIOS**