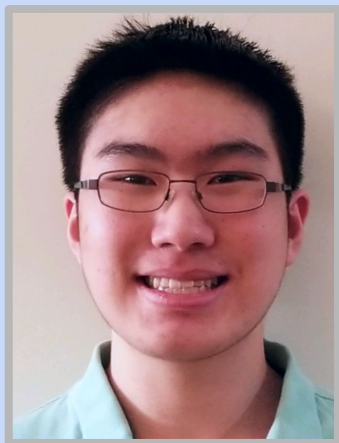


Miniature Smart Car Hardware Design

Week 2:

Brandon Cheng



Aamay Puntambekar



Michael Mogilevsky



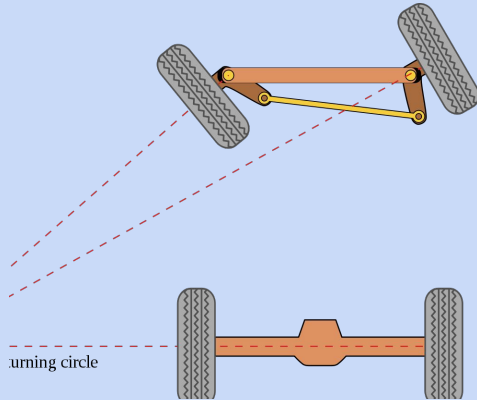
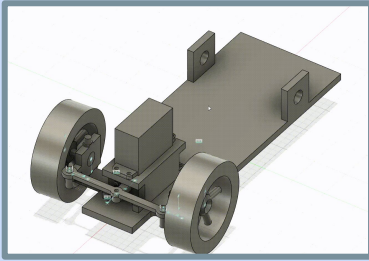
Brief Project Overview

- Design/prototype a $\sim 1/15$ scale platform for miniature smart cars such that they can be repeatedly tested in the orbit smart city environment.
- Emphasis on repeatability and precision using sensor feedback

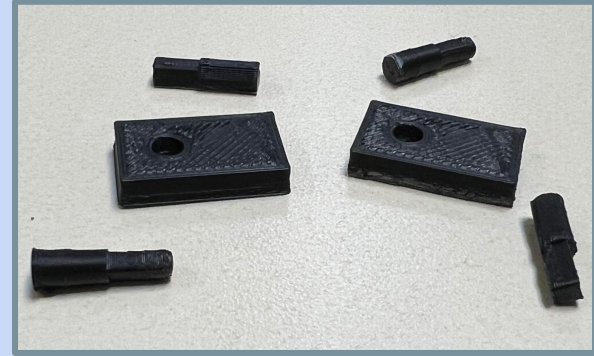


This Week

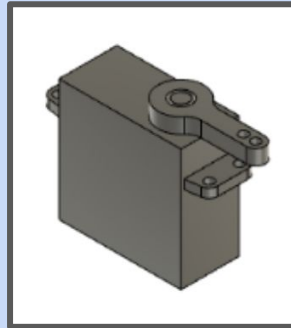
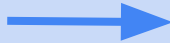
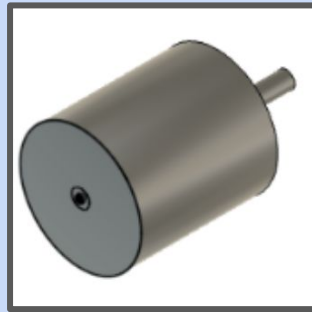
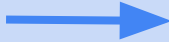
CAD Model development



3D Printing/Testing tolerance



This Week pt. 2



Hardware List

Electronic Parts

- [Brushless motor - \\$20.99](#)
- [~~\\$15.56~~](#)
- [new servo](#)
- [~~ESC - \\$47~~](#)
- [NEW ESC: \\$17](#)
- [Encoder - \\$5.78 x2](#)

Next Week's Goals

Continue working on CAD model for Differential, Axels, Electronics, and Hardware Components

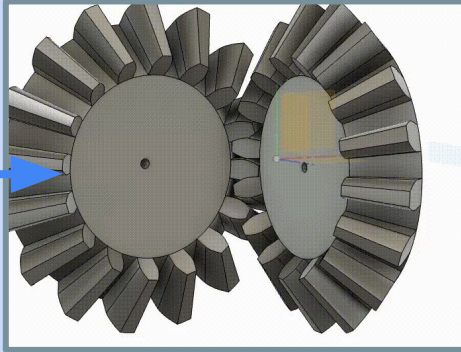


GF Gear Generator

OS: Mac OS, Win64

A basic gear design a

Bevel Gear Test



Testing incorporating hardware components to create joints

Example differential

