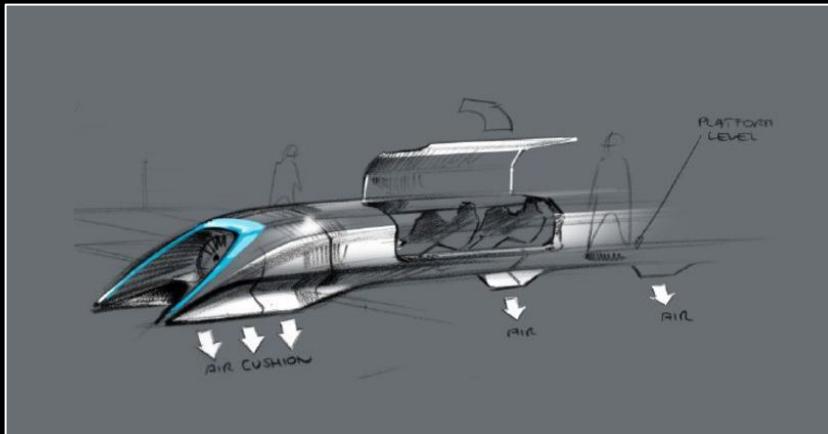




Pod Reveal Spring 2021

The Hyperloop Concept



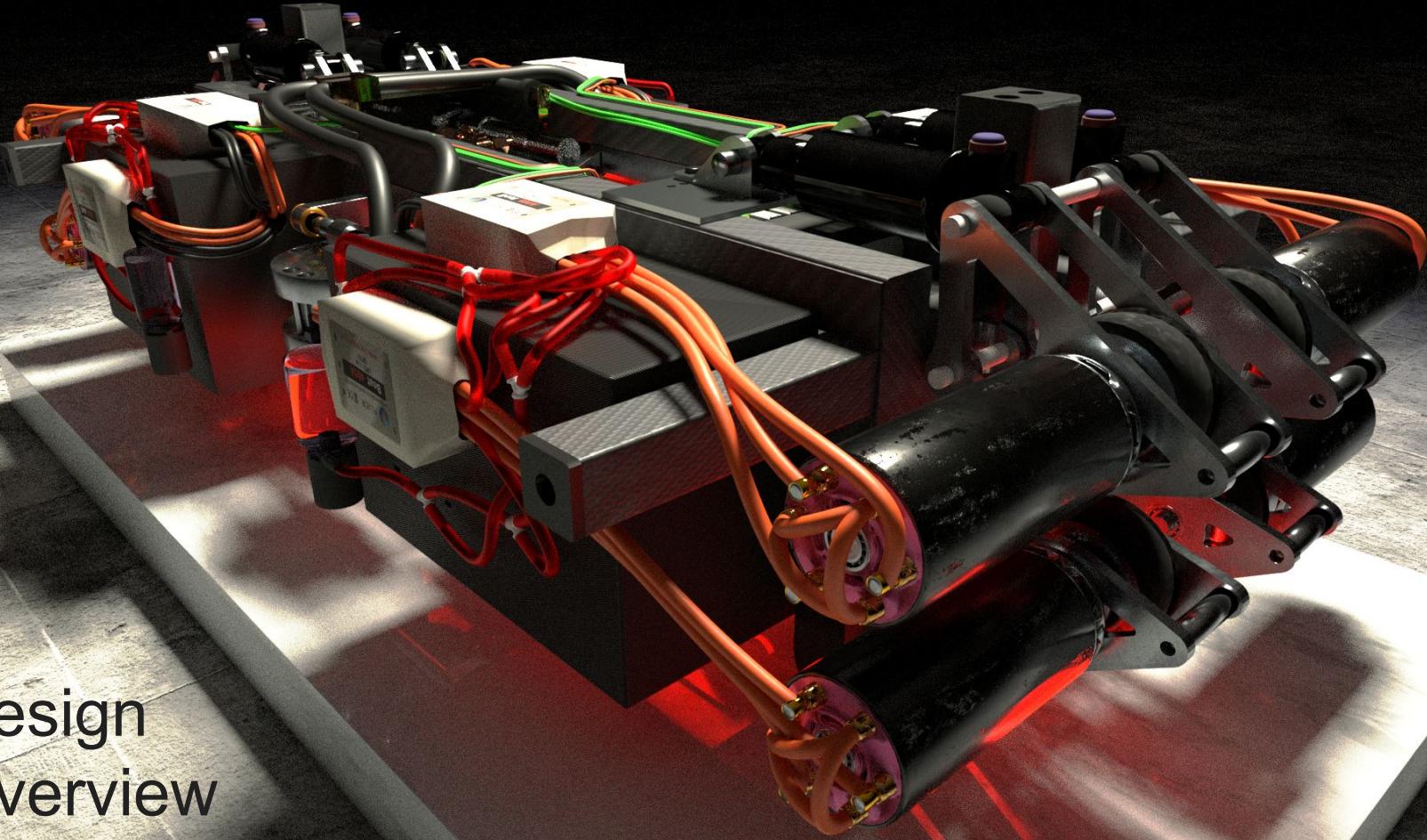
Hyperloop Pod Competition



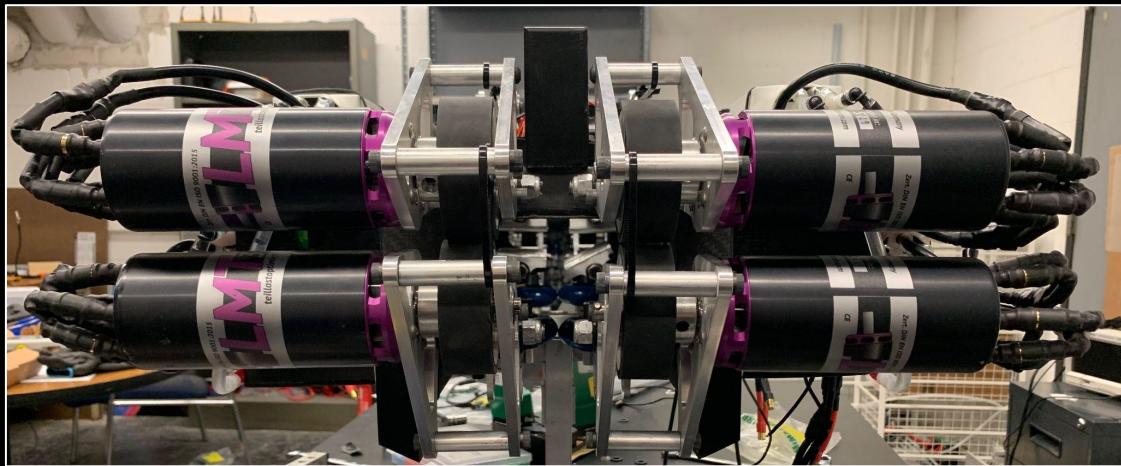
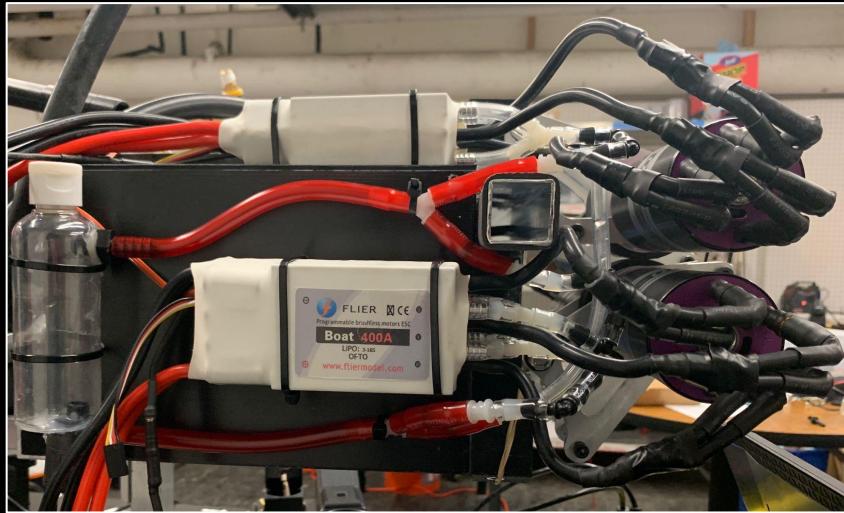
Illinois Tech Hyperloop

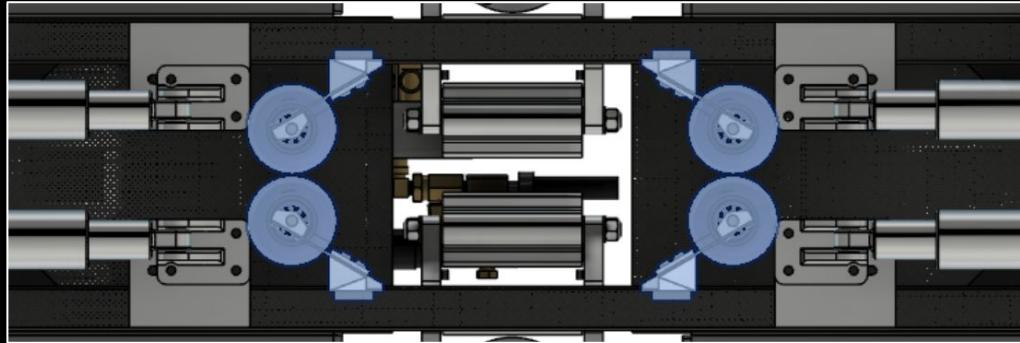


Design Overview

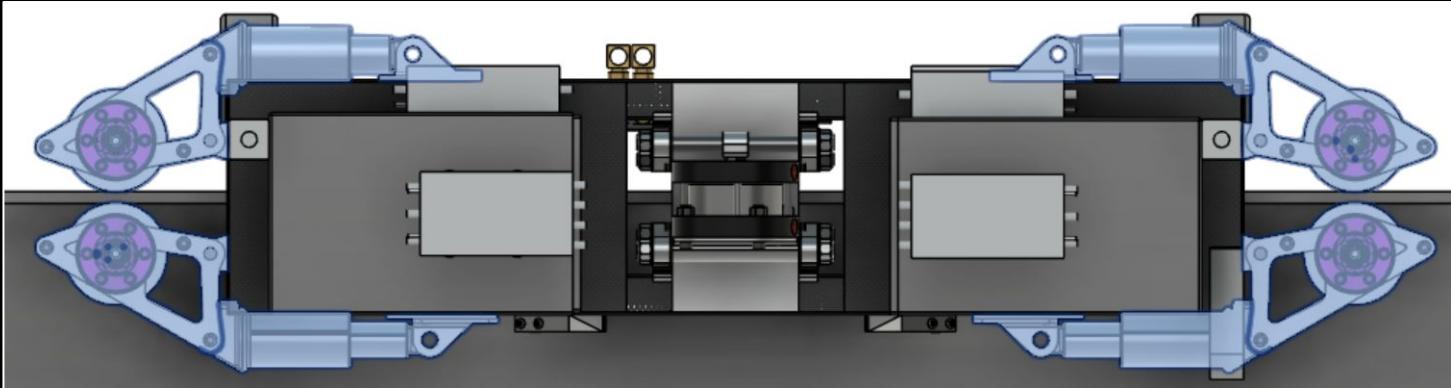


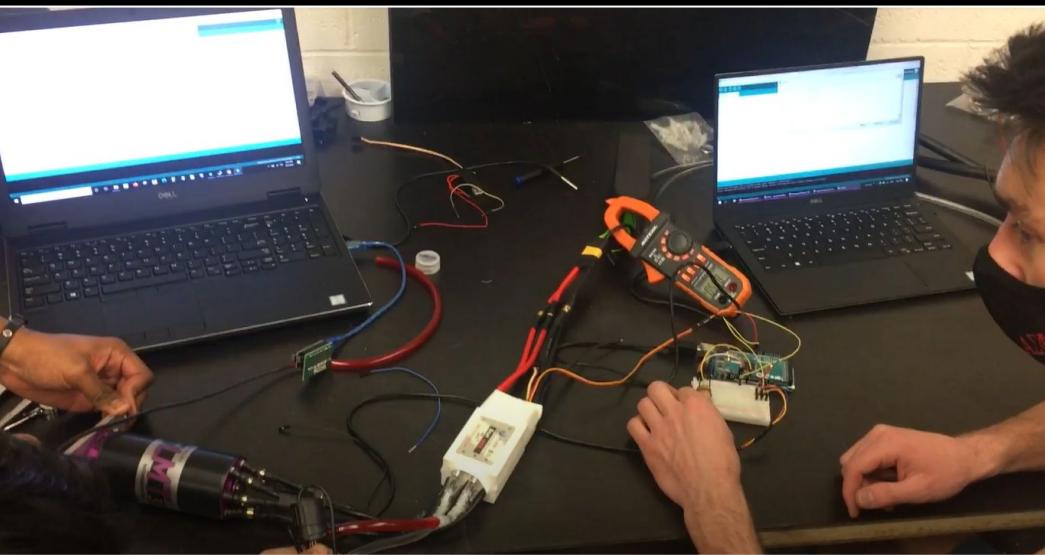
Propulsion



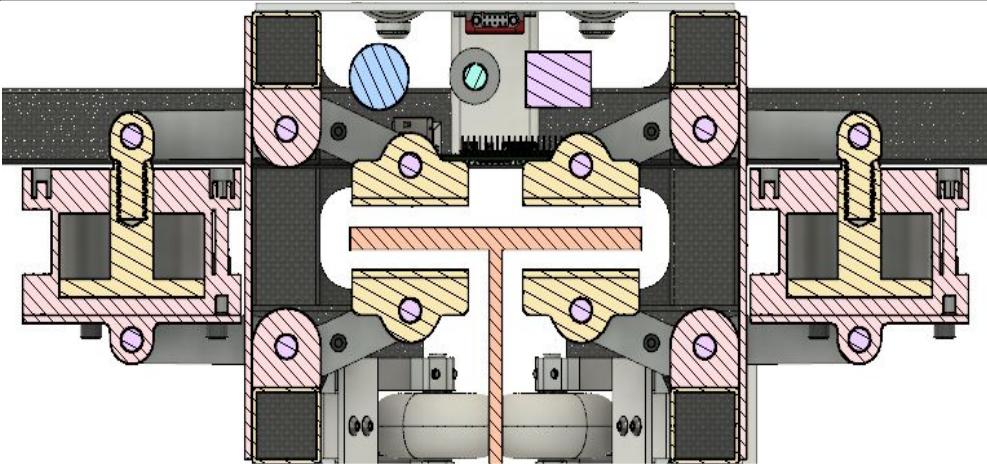


Suspension

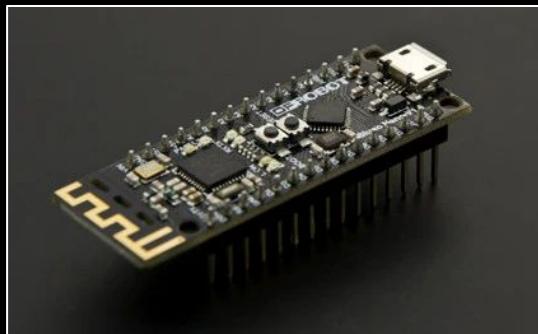




Power Electronics



Braking



Software and Controls

A screenshot of Microsoft Visual Studio Code showing a Python file named `module.py` and an Arduino sketch named `KeyboardESCInput.ino`. The Python code is for a failsafe function, while the Arduino code handles keyboard input and ESC control. The interface includes a Solution Explorer, Git Changes, Python Environments, and a status bar indicating the current line and column.

```
def failsafe(self):
    global arduinoInctData, arduino2ctData, arduino3odData

    self.brakingDistance1 = (arduinoInodData[2]**2) / (2*self.deceleration)
    self.brakingDistance2 = (arduinoInodData[3]**2) / (2*self.deceleration)

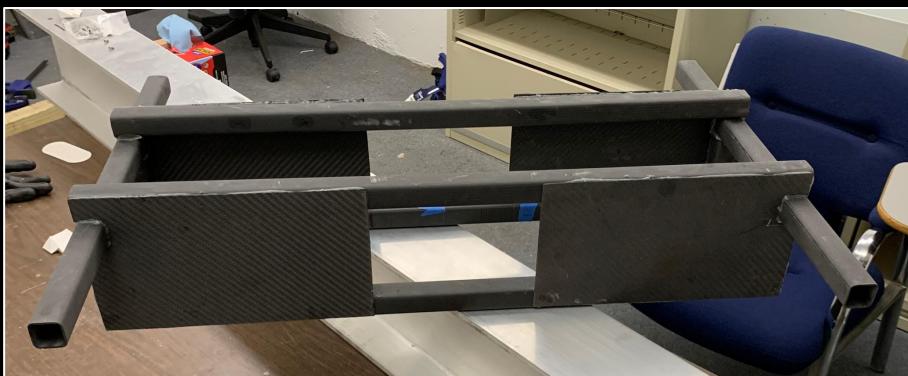
    if(arduino3odData[0] >= self.trackLength - self.brakingDistance1 or arduino3odData[1] >= (self.trackLength - self.brakingDistance2)):
        return False
    elif(arduinoInctData[0] >= self.maxTemp or arduinoInctData[1] >= self.maxTemp or arduino2ct[0] >= self.maxTemp or arduino2ct[1] >= self.maxTemp):
        return False
    elif(arduinoInctData[2] >= self.maxCurrent or arduinoInctData[3] >= self.maxCurrent or arduinoInctData[4] >= self.maxCurrent or arduinoInctData[5] >= self.maxCurrent or arduino2ctData[2] >= self.maxCurrent or arduino2ctData[3] >= self.maxCurrent or arduino2ctData[4] >= self.maxCurrent or arduino2ctData[5] >= self.maxCurrent):
        return False
    elif(deltaTime_Seconds() >= self.maxRunTime):
        return False
    elif(keyboard.is_pressed(" ")):
        return False
    else:
        return True

def go(self):
    global arduinoInctData, arduino2ctData, arduino3odData
    if(arduinoInctData[2] >= self.optimalCurrent and arduinoInctData[3] >= self.optimalCurrent and arduinoInctData[4] >= self.optimalCurrent and arduinoInctData[5] >= self.optimalCurrent and arduino2ctData[2] >= self.optimalCurrent and arduino2ctData[3] >= self.optimalCurrent and arduino2ctData[4] >= self.optimalCurrent and arduino2ctData[5] >= self.optimalCurrent):
        self.setRate -= 1

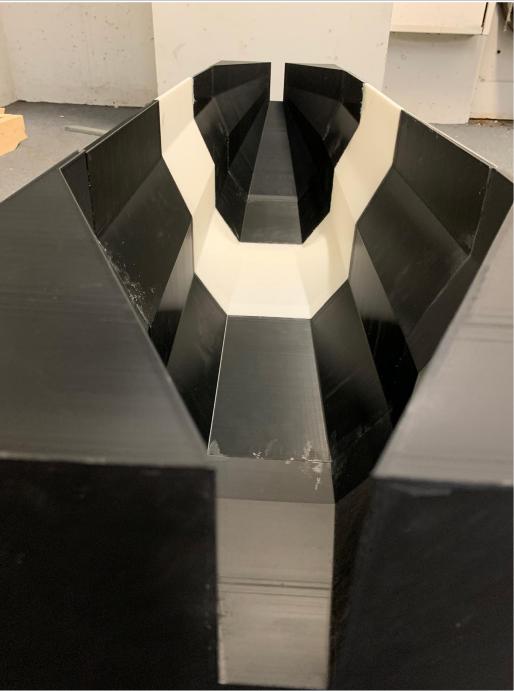
    elif(arduinoInctData[2] < self.optimalCurrent and arduinoInctData[3] <= self.optimalCurrent and arduinoInctData[4] <= self.optimalCurrent and arduinoInctData[5] <= self.optimalCurrent and arduino2ctData[2] <= self.optimalCurrent and arduino2ctData[3] <= self.optimalCurrent and arduino2ctData[4] <= self.optimalCurrent and arduino2ctData[5] <= self.optimalCurrent):
        self.setRate += 1

    if(self.setRate > 180):
```

Structures

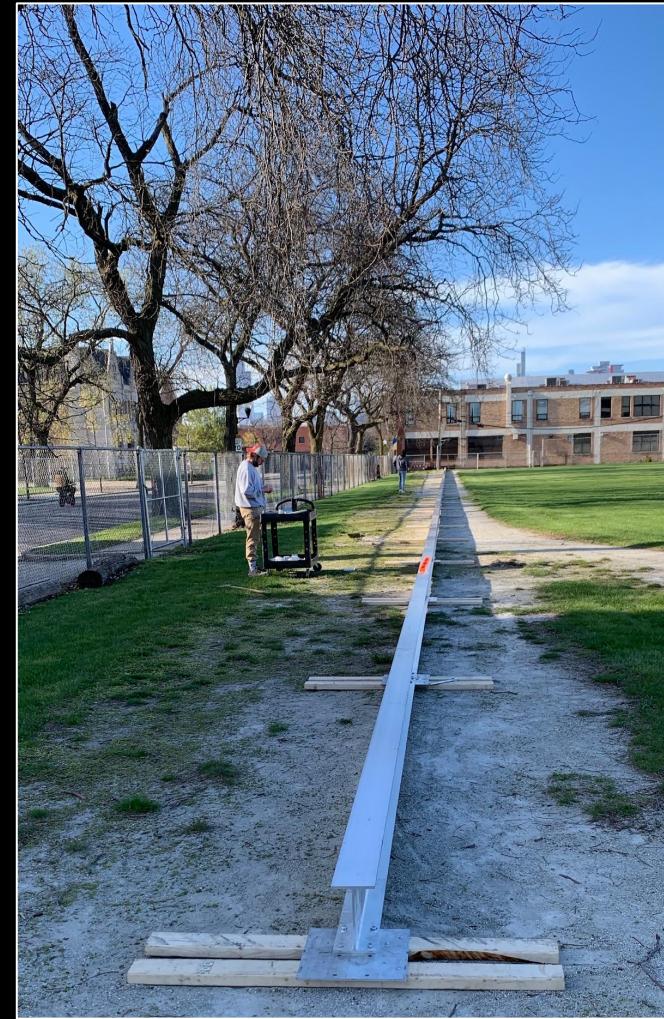


Aerodynamics





Test Track





Thank You!



life_by_jonte_williams
Chicago, Illinois

A person wearing a black face mask and a t-shirt with an American flag design is standing outdoors, holding a long, thin metal beam over their shoulder. They are standing near a white wall with various tools and materials scattered around. The post includes standard social media icons for heart, comment, and share, along with a caption and hashtags.

Like Liked by kian_m10 and 42 others

life_by_jonte_williams "Test Track Lead" - Illinois Tech Hyperloop. I'm lead for a reason.

#illinoistechhyperloop #leadership

