Assignment

1. **List out the datatypes of each of the signals that are being transferred.**
   * Left Image: height(float), width(float), colour(String) of the cone
   * Timestamp: int:int:int or list of integers
   * Bounding Box: (for each cone): class of cone, confidence level(integer), coordinates(x, y)(float, float), width(float), height(float),
   * Cone Position array: coordinates(float, float, float), class of cone
   * Map: Map of points representing cones
   * Car position:(x,y,z,𝛉)(float, float, float, float)
   * Throttle: (float)
   * Steering angle:(float)
   * Velocity: float
   * Yaw rate: float
2. **In reality, these signal transfers suffer from the problem of time lags. How would you deal with time lags? And how will you deal with the difference in the frequency of the sensor data?**

Different frequencies of the sensors can be dealt with by storing the data and for each sensor, using the reading which is closest to the average time of other readings. Time lags can be taken care of by multi-threading, which might reduce the processing for the system as a whole but since individual time lags.

Time lags can also be reduced by better hardware or using multiple sensors for the same input. Doing so, we can double the frequency of any data.