**Week 1**

* Problem statement narrowed down on
* Threat level factors considered : object orientation & angle, relative speed & displacement of the obstacle, (maybe the likelihood of erratic behaviour)
* The algorithm for classification poses the largest challenge in the detection of orientation angle.
* Initially experimented with the usage of stereo cameras to measure depth of the object and use that data to calculate angle of orientation.
* Currently exploring the usage of quaternions to directly extract angle of orientation from a rotation matrix obtained by processing pedestrian body landmarks (identified using mediapipe at the moment) due to latency issues in the usage of two simultaneously active cameras.
* Learned how to implement a work ethic for projects :
  + Maintain git repo
  + Record decisions for paper writing
  + Have hackathons to speed up coding

**Week 2**

* Found the angle of orientation from quaternion but only from 0 to 180
* Working on a method to detect a face to determine if the subject is front or back facing
* Ditched haar cascades for the same due to failure in different lighting