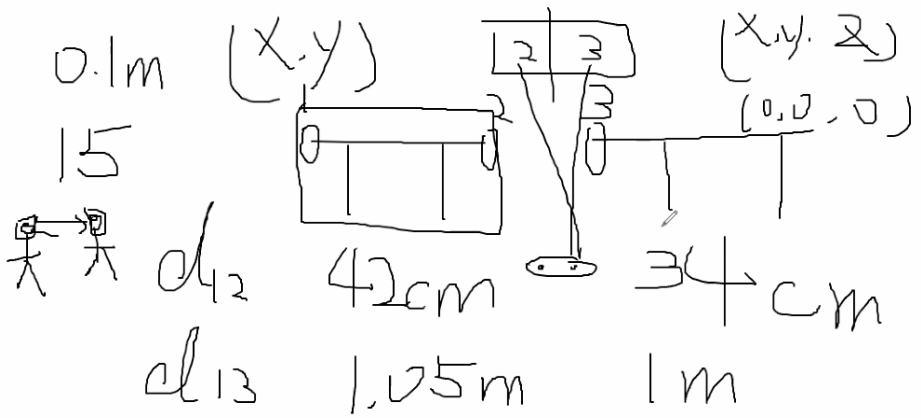
Drone sensing meeting notes

week#3

09/21/2020

1. Duncan shared this result(ZED camera point cloud accuracy) with us:



   Measured distances between points 1 and 2 is 34cm (actual = 42cm), between points 2 and 3 is 100cm (actual = 105cm).

2. Replace two benches with two solid paper boxes to redo experiment (compare point clouds from ZED and mmWave radar)

3. Compare the cascaded antenna design with the virtual antenna array (MIMO) (vs TX beamforming?)
   https://training.ti.com/sites/default/files/docs/cascaded-radar-and-body_chassis-automotive-applications.pdf

4. schedule new meeting time: 9pm Monday

Next:

1. focus on data collection to collect raw data from mmWave FMCW radar and use MATLAB to do data processing
   refer to: https://www.ti.com/tool/DCA1000EVM
2. find out the difference in angle resolution among different TI mmWave sensors.