Senior Design Weekly Meeting #7

Meeting Minutes

10/19/2020   15:30 - 16:30

CM/TM: Dr. Honggang Zhang
Students: Zhuoming Huang, Lucas Lomba, Yue Sun, Alinson Sanquintin

- **Agenda**
    1. Updates from Zhuoming
        a. BPM-MIMO configuration
    2. Other updates and suggestions

- **Notes**
    1. Updates from Zhuoming:
        a. BPM is successfully configured for one TX. Learning to configure BPM with 2TX and 3TX for MIMO.
        b. Major tasks*
            i. Generate the elevation-azimuth-range intensity images from SuperRF dataset
            ii. do some simple experiments to detect distance between two boxes
        c. Minor tasks
            i. Calibrate the sensor
            ii. Learn OptiTrack
        d. Net/cage setup in flight-test room
            i. cannot install the net on ceiling/wall (building code violation)
            ii. Lucas will share some materials we can purchase from McMaster Carr for building a cage
    2. Others
        a. Alinson proposed a CNC machine using optical drive
            i. remind us the milling machine in the lab (Lucas will check that out)
        b. Yue is building the dataset from SuperRF, and learning the GAN in pytorch
- Follow-up
    1. Slider has arrived (need a 24V driver).

2. Understood the structure of SuperRF dataset