

ENGIN492, Senior Design Weekly Meeting #2

Meeting Minutes

02/01/2021 15:30 – 17:05

CM/TM: Dr. Honggang Zhang

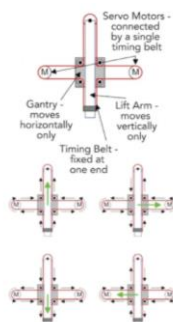
Students: Zhuoming Huang, Alinson Sanquintin, Lucas Lomba

- **Agenda**

1. Ideas of PCB design
2. DIY linear slide fits onto the drone

- **Notes**

1. PCB design idea
 - a. Crazyflie deck connector (V)
 - i. connecting the flow deck under the drone and the multi-ranger (or z-ranger) deck on the top. The top deck will be used to avoid collision in an indoor environment.
 - b. Stepper motor driver (X)
 - i. At least 2 stepper motors, 5V or 12V, as small as possible
 - ii. has to be compatible with the DIY slider
2. DIY slider
 - a. Check with Andrew for the parts availability (Fri, 2/5), order ASAP if any parts not in stock
 - i. timing belts and pulleys ($w=4\text{mm}$ or 6mm)
 - ii. linear rails and bearings ($d\leq 6\text{mm}$)
 - iii. 2 stepper motors and motor drivers (5V or 12V)
 - b. come up with a design that fits the drone
 - i. minimizing size and weight
 - ii. watch out for the propellers



- c. <https://www.thingiverse.com/thing:1517211>
- d. place 3d-printing order ASAP

- **Task list**

- **Follow-up**