

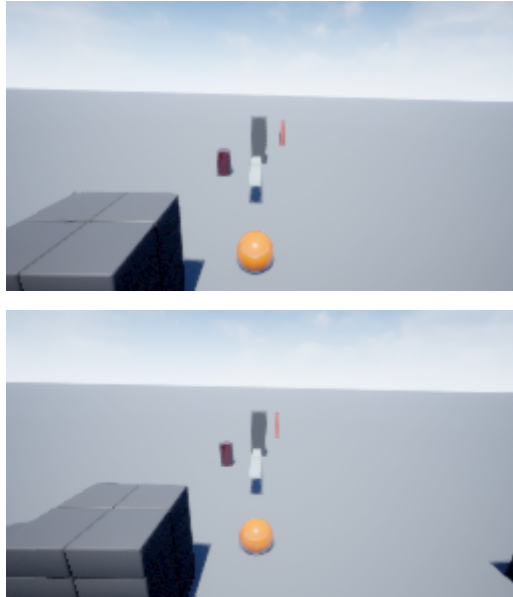
Report

Simulated Aircraft Landing

- Plots are shared as pdf.

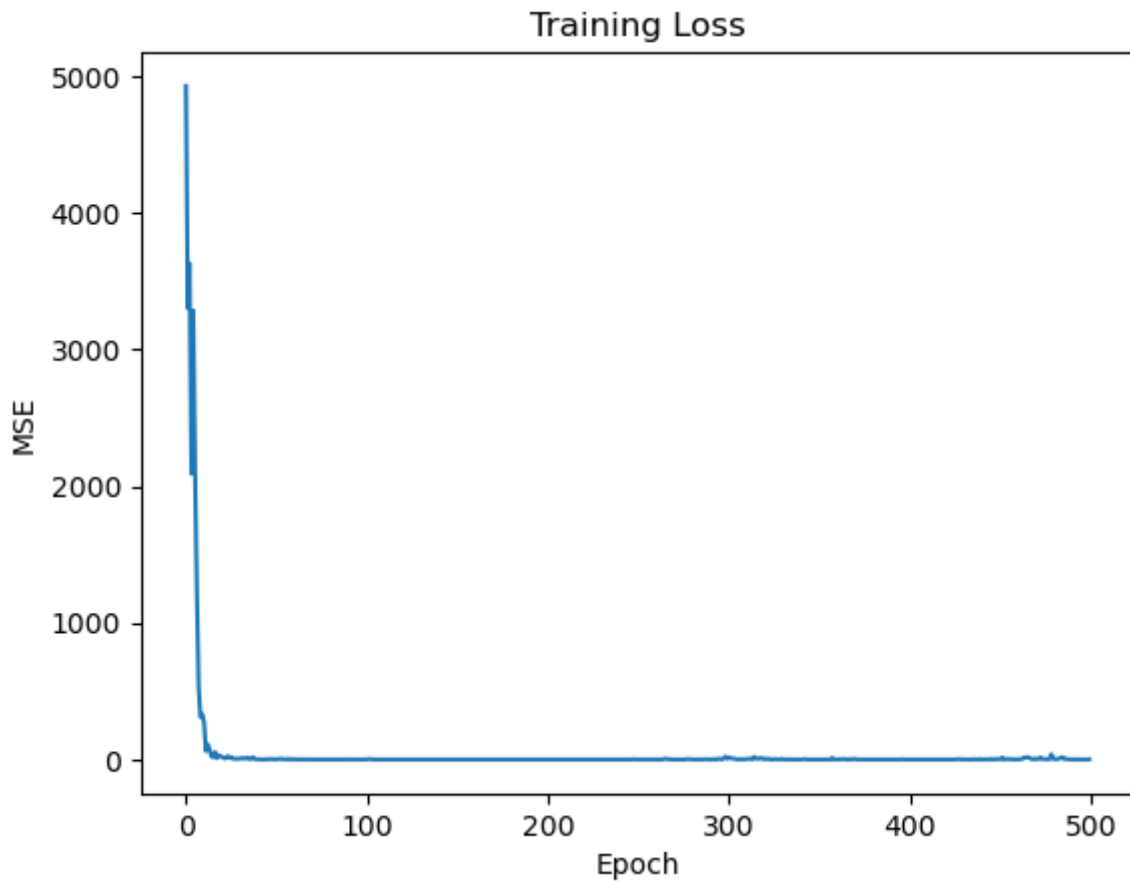
AirSim based Aircraft Landing

Dataset Sample Images



Training DNN

- What is being predicted?
 - *The altitude of the helipad. In other words, the input is the image (as shown above), and the output is the (euclidean) distance between the helipad and the drone.*



```
499/500;      Loss: 0.23355694115161896;  Time Taken: 0.9140527248382568.  
500/500;      Loss: 2.2024085521698;  Time Taken: 0.9012167453765869.  
===== Training Completed =====  
Time Taken: 490.84684777259827
```

Testing DNN

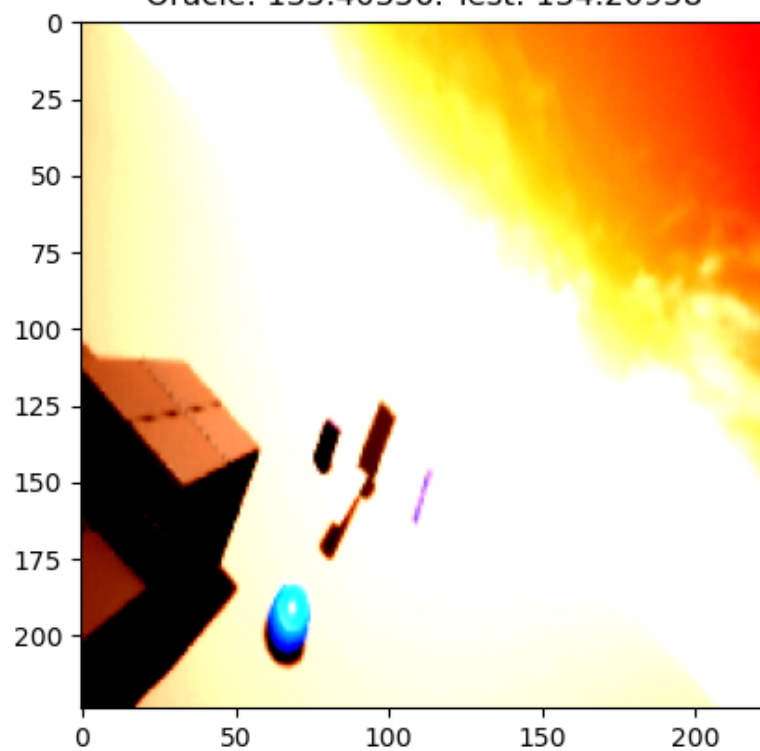
```
# Model  
MAE: 2.0731265544891357  
MSE: 10.981839179992676  
Total Time Taken: 0.28817319869995117  
Average Time Taken: 0.0016189505544941076  
Model Parameters: 5406521
```

Sample Images

Note: The quality of the images, as of now, are bad as they're directly saved from normalized tensors. I think this can be fixed.

Legend. "Test" means our trained model.

Oracle: 135.40356. Test: 134.20958



Oracle: 134.44469. Test: 131.04770

