

AutoDrive Project Weekly Report - February 22nd

1. Fails of the week

- None to report

2. Successes of the week

- Tremendous success with the improvement of our algorithm from 2 to 8 frames per second. The car handles itself on tight curves with high speed and high reliability.
- Prototype can now run smoothly on a more twisted tracks at a higher speed
- See the prototype running: <https://youtu.be/il6FfqCbC8o>
- Wrote usability test protocol draft

3. Difficulties this week

- The performance of the algorithm bottlenecked at 8 fps, to further optimize we need to use two threads: one on recording the video and save them to a shared stream and the other on processing each frame of the video

4. Goals for next week

- Try using two threads as mentioned above to separate the task of recording and processing
- Setup the environment necessary to use the Movidius Compute Stick to speed up the inference of our neural network
- Finalize plans for user testing and prepare to find participants