

**12 January:** First class day of the semester. Talked with Ahkbas about switching teams but it is in the best interest of the team for me to stay. Talked with Will on how he is going to hand off his work to me. Brainstormed general ideas for all the sprints this semester.

**14 January:** Worked with Will to get the code running and walked through Git together and next steps.

**15 January:** Worked on getting TensorFlow running. Got all packages installed and now just working on compiling images into 2 folders to test if I have TensorFlow working properly. Created a document to help the team easily walkthrough the set-up process.

**19 January:** Met with the team and fixed the GitHub for this semester and got all of are tasks transferred over to the team. Got the team all on the same page on the over arching task of the team.

**21 January:** Installed Inventor and watched some tutorials to review the concept. Added items to the backlog since we switched to teams.

**22 January:** Met with the team and discussed next steps and reviewed the vision statement with everyone.

**24 January:** Turned in vision statement and backlog.

**26 January:** Worked on creating a POH and glossary of terms for the Sentaero. Set the goal of creating/finishing documentation on how to power on the Jetson.

**30 January:** Went to start documentation for how to power on the Jetson, but I do not have lab access right now. Reached out to Akbas to get lab access and hopefully get it by tomorrow to start working on the documentation.

**31 January:** Started the Jetson Nano Tutorial; Waiting on SD card reader to finish it up and hopefully will have one by the end of today.

**1 February:** Received SD card reader and walked through the process of flashing/formatting the memory card and using etcher. Will start walking through how to power on the Jetson next.

**2 February:** Met with the team Parker did not show up again and my teammates seem a little lost without him I believe Akbas has given them some direction on how to operate without him. My apartment flooded yesterday so I got a little behind on what I had planned to accomplish by this time but will hopefully make up the time this weekend.

**4 February:** Started turning on the Jetson but got a little confused. Contacted Will and he is going to explain/show me what I am doing wrong on Tuesday. I believe we might be missing a vital piece for when turning it on

**7 February:** Met with the team and talked with Will and troubleshooted the issue with powering on the Jetson. Looked over the PowerPoint it was pretty much a copy of what I created for the last sprint so a lot of work to do over the next day to get it ready for Thursday.

**8 February:** Worked on the PowerPoint for the past 2 hours and pretty much redid the whole thing myself, as what was put down by my team members was not much.

**9 February:** Gave the presentation, went ok but didn't get to discuss anything with the team because they all left after the presentation.

**11 February:** Brainstormed how I wanted to accomplish the next sprint and have ideas to propose to the team on Tuesday with how we want the videos to be. I am debating between recording every step or only recording the parts I think are unclear or difficult

**14 February:** Met with the team Parker was not there but decided to move forward with recording every part of the set up via a screen recording.

**15 February:** Recorded powering on the Jetson and have the set-up procedures to record now.

**16 February:** Met with the team (Laurel was the only one who showed up to class) set the goal of coming up with a game plan and having everyone saying what specific task they are working on for the semester.

**21 February:** Overall, I had a very unproductive weekend due to a family emergency but have plans to have the videos finished by Thursday. Met with the team and the hardware team and gained some valuable info for what they are looking for and seems like we are on track with payload casing as they are also trying to do the same thing.

**22 February:** Filmed etching and flashing the USB drive. Assigned myself items in the test plan to deliver on by Sunday.

**23 February:** Met up with Alejandro at the Micaplex and went through the startup procedures of the Jetson as if it was like at a flight. The team assigned themselves topics in the test plan to also deliver on by Sunday.

**24 February:** Researched the radio board the hardware team talked to us about, but I believe that might be a little out of our scope and we should stick to the two things we decided on at the start of the semester.

**26 February:** Completed my 3 sections of the test plan. Began research whale AI

**27 February:** Started researching wild me AI and how to get it running on my machine and the jetson

**28 February:** Met with the team and seems like we are making good progress. Figured out what I need to do to get wildme working on my machine. I need to install Cuda, Tensorflow, OpenCV, and Keras.

**2 March:** Met up with the team and completed my sections of the test plan.

**3 March:** Started working on getting wildbook ia installed but kept running into some errors with the installation, hopefully get those troubleshooted soon

**6 March:** Worked on the wildbook – ia again, got one error fixed with the pip command by installing an older version of pip but now running into an error with PyTorch which I am hoping to get troubleshooted soon. Created a PowerPoint presentation and added basic template slides for right now. I got into contact with the team and gave them the tasks that we need to complete this week.

**7 March:** Troubleshooted PyTorch but had no luck getting the code running on machine.

**9 March:** Met up with the team and set up some goals for the rest of the semester. Hoping to be able to print some sort of image on the screen soon.

**21 March:** Met up with the team after spring break. Walked through the code Laurel had and found some major errors with the output, therefore we are trying to troubleshoot and go a different route.

**22 March:** Emailed Alejandro for the code and started walking through it. Found the GitHub the code references and started digging through that.

**23 March:** Having trouble with getting the code running something with the system calls.

**25 March:** Not sure how to incorporate the code Alejandro gave us with the code Laurel has. Went back to the tutorial Will sent me and started stepping through that.

**27 March:** Collected a small amount of whale images. Started by defining what images I wanted to collect and set up the folder paths of training and testing. Took the images and started labeling them and put a small box around them for the neural network to recognize what a whale is and not.

**28 March:** Showed Laurel what I have done and were working to combine my code of drawing the boxes around the whales and her code that identifies all animals.

**29 March:** Worked on training the neural network ran into a problem with my Tensorflow not wanting to work. I will talk to Will tomorrow about it.

**30 March:** Talked with Will about my TensorFlow and it seems I possibly don't have the right versions of TensorFlow and python to be compatible with each other. Stepped Laurel through how to get my code for drawing boxes on computer running, so she can label some images as well.

**2 April:** Researched what version of python and Tensorflow I should have to make this compatible. Started documenting the errors I am running into and my fixes for future teams.

**4 April:** Parker and I met with Dr. Ahkbas to give an update on the team.

**6 April:** Met with team, set up some goals to have documentation finished early and to start slowly working on the PowerPoint. Still troubleshooting my TensorFlow