Daily Log

Monday February 3

Spoke with other groups using YOLO and found that the Class = -nan error I was getting before was a normal part of the training. I looked into what each of the training parameters meant to try to gain insight on how I might be able to improve the validation accuracy.

Tuesday February 4

Tested the most recent weights on random images of the Perplexus, but found that no bounding boxes were drawn even when I set the threshold value to 0. Don't know why this might be happening, and I played around with a number of different test images, threshold values, and confidence parameters. Suspect that the training didn't run for enough iterations & didn't have enough data.

Thursday February 6

Listened to the talks remaining in the period. Then began annotating more files for the training dataset. At the end of the period I realized that I had been annotating in the Pascal VOC file format, not YOLO and became sad because I had to start over.

Timeline

Date	Goal	Met
Today minus 2 weeks	Begin annotation and implementation of the YOLO network	Yes
Today minus 1 week	Get a version of YOLO trained on a custom dataset up and running	Yes, I trained YOLO on the custom dataset
Today	Obtain a higher accuracy on YOLO	No, I'm still working on debugging
Today plus 1 week	Train the network with more data	
Today plus 2 weeks	Test the algorithm on the Perplexus chassis system	

Reflection

There's a lot going on behind the scenes in terms of training YOLO that I need to figure out. I want to get set up on the GPU and train on a larger dataset, then hopefully sync with Khushi's hardware portion later next week.