

## Daily Log

### Wednesday September 4

Annotated approximately 200 more images and uploaded to Google Drive for future use. Reorganized labeled images directory so that their respective class label files were associated with the correct annotation batches. Researched simple UI commands that can be used with the tkinter module for UI design.

### Saturday September 7

Annotated another 200-300 images and uploaded to Google Drive. Began writing code for a daytime-nighttime categorizing program that will take a directory name and parse through all image files it finds, and based on EXIF data found using the PIL module, will copy and group images based on whether they were taken during the day or at night. Set up Linux virtual environment for testing purposes.

## Timeline

| Date         | Goal  | Met   |
|--------------|---|---|
| September 2  | Continue annotating images(400-500), begin work on day/night classifier   | Yes, will continue to annotate images, may need to refine classifier due to images being taken over long period of time |
| September 9  | Finish day/night classifier, continue annotating images(400ish), begin basic GUI program using tkinter                    |   |
| September 16 | Continue annotating images(400ish), finish GUI program, work on connecting GUI to Darknet in order to run YOLO classifier |   |

## Reflection

My work this week was mostly just a continuation of what I had been doing over the summer with the continuation of annotating images, with also some progress being made towards some of the initial items I gave myself on my project timeline from junior year. The next goal that I set for myself on my timeline was to be able to iterate through at least 2000 images and return their classifications by the end of September, which I expect to surpass. A portion of the code from my day/night classification program is shown below:

```
def main():
    file_dir_start = "C:\Users\jackc\Desktop\Senior Lab Work"
    imgs = os.listdir(file_dir_start)
    img_date_dict = {}
    night = []
    day = []
    for i in imgs:
        img_date_dict[i]=datetime.strptime(pull_date(i)).hour
    for i,hr in img_date_dict:
        if(hr<5 or hr>21):
            night.append(i)
        else:
            day.append(i)
```