WEEKLY REPORT and MEETING AGENDA

Report #:6   Project Name: <u>Traffic Light Detection and Tracking</u>
Date:<u>3/14/23</u>   Prepared by: <u>Xiaohu Huang</u>

Agenda for the weekly meeting

1. Discuss datasets used for annotation
2. Discuss progress so far
3. Assign tasks and responsibilities
4.
5.
6.
7.
8.

Accomplishments during this period

1. Successfully loaded dependencies into docker container
2. Updated improved model version
3. Labeled 200+ images for training
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8.

Plans for next period

1. Train next version of model with new images
2. Work on Onyx output
3. Work on tracker and annotation
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7.
8.

Project management status

1. Schedule and milestones
2. Teamwork
3. Purchases
4.
5.
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8.

Members present: All team members present
Instructors present: Dezhen Song, and Shuangyu Xie.

<u>Meeting Starts at 8:30 AM</u>

Meeting Notes

Team: We have most of M city images, but need more photo since behaviour inconsistent on bag files

Professor: We can augment with our own program, augment size, brightness, contrast are good factors to improve detection, deep learning engines give better result based on data size, how big is your data size?

Team: We have about 200 images in the training set

Professor: If transfer learning you need smaller size of data, you can get good results with relatively small amount of training data. We have GPU available on the car right now so network size can be bigger. We will probably allocate one CPU for traffic light detection.

Team: Question about labeling, if you have traffic light in the distance and they are not super visible should you try to label them?

Professor: Don't worry about them, they will probably get filtered by another algorithm anyway. The lights should be detected at a reasonable distance though so there's enough time for braking and processing

Team: So far all images from bag file, mentioned not overfitting, so it's okay to only train on M city data? Or should we get data from other sources

Professor: M city only should be fine since we only get tested on those data

Team: What incentive is there for a gpu on a car?

Professor: Neural networks mostly.

Team: Question about CDR presentation date?

Professor: March 28, don't forget to update gantt chart

Meeting Ends.

Weekly Report Form. CSCE 482 & CSCE 483