WEEKLY REPORT and MEETING AGENDA

Report #: 6 Project Name: Traffix Object/Lane Detection - 2A1
Date:10/31/2022 Prepared by: Viet Nguyen

Agenda for the weekly meeting

1. Worry about the frame rate of ROS
2. Polish up the actual development for more content to be able to present more content
3. Finish up the loose ends of the CDR document
    - Clarify the requirements with TA and grader
4. Presentation production
5. Presentation demo run-throughs

Accomplishments during this period

1. Pytorch now working locally for all now
    - Maybe all dependencies are handled
2. Khai successfully somehow got the Pytorch to work on ROS (python module that is important for hybrid nets) in the first day which I am very jealous of since the dependencies would not cooperate for me
3. Everyone can now do catkin workspace
4. Finished CDR report
5. Finished CDR presentation

Plans for next period

1. Integrate working HybridNets imports and code in ROS.
2. Made additional progress on the package we are building for easy configuration.
3. Have more concrete deliverables to present for final presentation
4. Deep dive into given ROS node by HybridNets github
5. Start testing with other lane detection alternatives to check performance

Project management status

1. Schedule and milestones: Hybridnets is officially on ROS (at least for Khai's end) and we will try to complete the module now that we can debug that, so big progress! We can also now work on the package now since we have all required dependencies figured out.
2. Teamwork: Team is working well but half of us have unexpected health problems so some progress might have been impeded but that can't be helped.
3. Purchases: Collab subscription- 10 dollars a month.

Minutes from previous meeting

- CDR requirements talked about with TA and grader
- ROS module is found in Hybridnets, which may aid us in our actual implementation
- Discuss potential of using ROS support uploaded to HybridNets repository.
- Integrate working HybridNets imports and code in ROS.
- Discovered that the HybridNets developers have uploaded ROS support using ONNX. This in a very early stage.
- We got HybridNets to run on sample images correctly through imports found on Pytorch documentation. This is very promising!