Weekly Progress Report

Oct 4 - 8th, 2021

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Noah's Ark | Autonomous Driving Lab
LiDAR Domain Adaptation

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Weekly Summary

- **Done:**
    - Checking for once eval_metric
    - Writing script for evaluation: `evel_log_extraction.py (to be pushed)`
        - Picking the best checkpoint in terms of
            - Average mAP for BEV of the 4 classes {car, truck, pedestrian, cyclist)
            - Threshold = 0.3, 0.5, 0.7 ?
    - Plot best checkpoint for each evaluation (oracle)
        - Oracle:
            - p40 → p40
            - ONCE→ ONCE
            - M2 → M2
    - Plot best checkpoint in oracle for each naive evaluation
        - Naive:
            - ONCE → M2
            - p40 → M2
- **In Progress:**
    - Retrain m2_oracle with full dataset (previously 5k)
    - Plot mAP for all checkpoint for each class
- **Recent Goals:**
    - Visualize frames having good and bad performances
    - Understanding: once_metric vs kitti metric

Work Logs

- Oct 4 (Monday)
    - Re-evaluate once dataset (was not evaluated using kitti metrics)
        - Has "eval_metric: kitti" but not outputting the kitti output
            - Result: we cannot use KITTI metric for ONCE due to its lack of information
    - Writing script for evaluation
        - Picking the best checkpoint in terms of
            - Average mAP for BEV of the 4 classes {car, truck, pedestrian, cyclist)
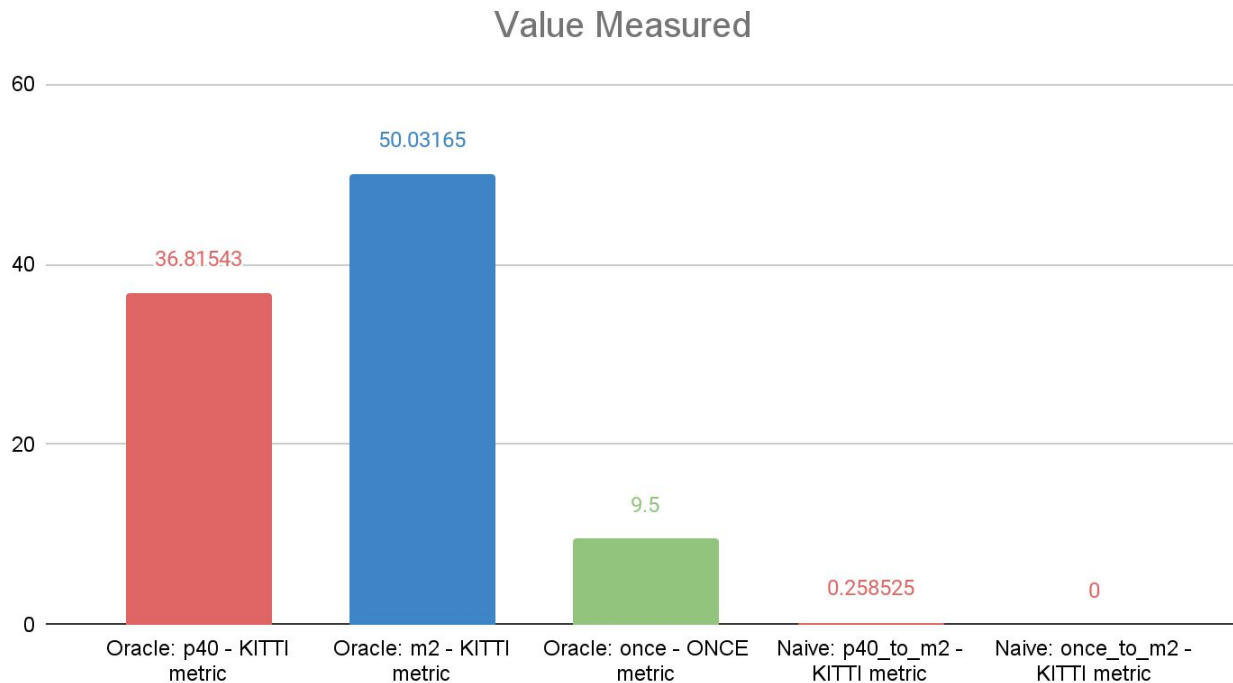   - Threshold = 0.3, 0.5, 0.7

Work Logs

- Oct 5 (Tuesday)
    - Developed "`evel_log_extraction.py`"
        - p40: oracle

	Metric	Measured value	ckp#
Oracle: p40_avg_mAP	kitti	36.81543	74
Oracle: m2_avg_mAP	kitti	50.03165	58
Oracle: once_avg_0-30m	once	9.5	74

Work Logs

- Oct 5 (Tuesday) (cont')

Value Measured

Work Logs

- Oct 6 (Wednesday)
  - Plot best checkpoint in oracle for each naive evaluation
    - Naive:
      - ONCE → M2
      - p40 → M2
  - Compare m2 oracle result with Xingxin, found that we used 5k split (to be retrained with full dataset)
  - Plot mAP for all checkpoint for each class

	Metric	Measured value	Ckp #
Naive : p40→m2_avg_mAP	kitti		74
Naive : once→m2_avg_mAP	kitti		58

Work Logs

- Oct 7 (Thursday)
    - Plot mAP for all checkpoint for each class
    - Retrain m2 oracle with full dataset split
    - Push `evel_log_extraction.py` to gitlab

End of October 8th, Weekly Report