

Road following with Nvidia JetRacer

TASK 1: Image regression task

- Data collection and image annotation with gamepad: Mark the (x, y) coordinates that represent the ideal driving path on the road (~800 images)
- Variety of challenges such as varying road conditions, lighting changes, limited field of view of the camera
- Model Training: train a network to predict the (x, y) coordinates of the optimal path, given the image
- Model optimization with TensorRT library and deployment on the Jetracer (torch2trt PyTorch to TensorRT converter)

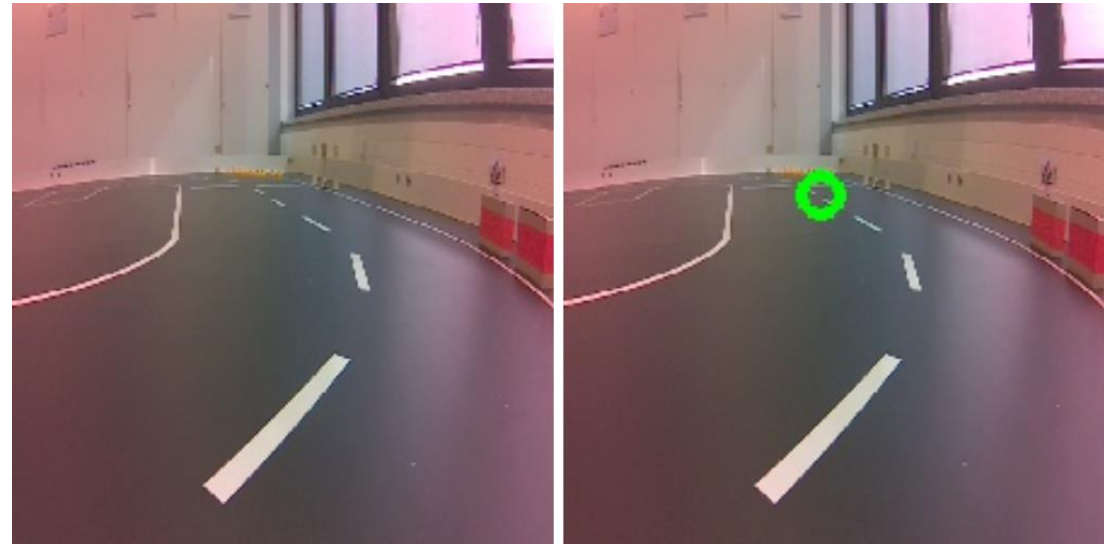


Image classification with Nvidia JetRacer

TASK 2: *Image classification*

- Binary classification problem to classify two different categories
- Training challenges: varying lighting condition, transfer learning
- Train set 70%, Validation set 30%
- Report accuracy on validation set
- Accuracy on test set will be calculated by us



Class 0:
Stop sign



Class 1:
Priority sign

