

## Test Environment

- Road with 1:10 scale of real environment
- **3.5m \* 7.5m**
- Including turning and side signs
- Different light conditions
- Various speeds possible



JetRacer POV



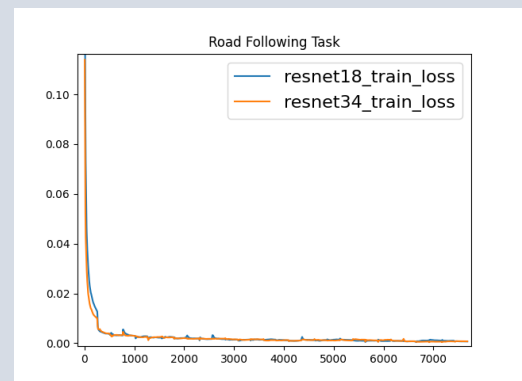
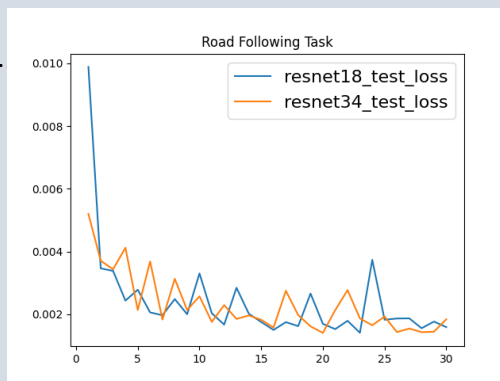
Training Environment



Road Signs

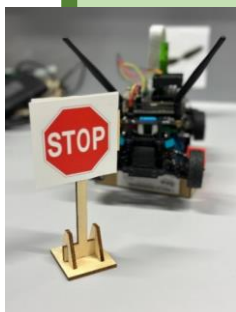
## Road Following

- **Data Gathering (JupyterLab environment)**
  - **2500** images, **80%** for training, **20%** for Testing
- **Data Labeling:** Return **x** and **y**
- **Network:** ResNet18 and ResNet34
- **Data Augmentation**

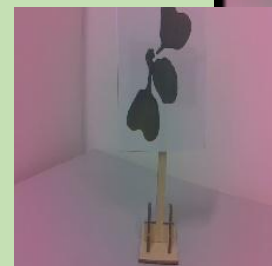
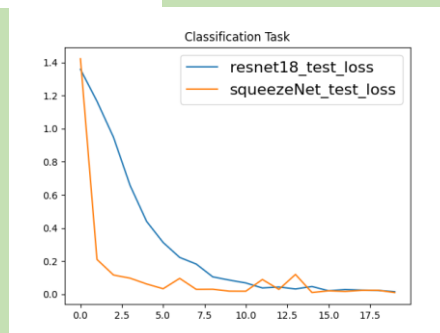
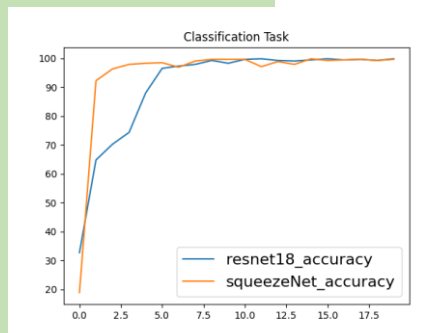
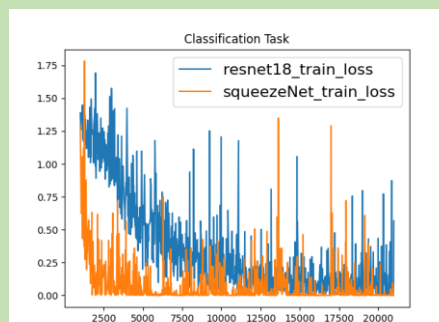
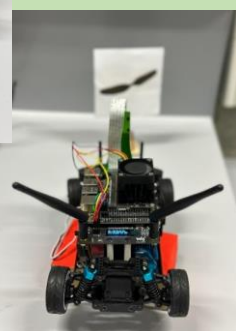


## Classification

- **4** main categories of signs
- **Augmentation** the data



Classification Testing



Data Augmentation