

# Project README

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This project is developed and tested on Ubuntu 18.04 with Python 3.6.

## Running Instructions

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### Creating conda environment

To create a Python 3.6 conda environment, please run the following command:

```
conda create --name myenv python=3.6
```

To activate the conda environment, run:

```
conda activate myenv
```

Then, install all necessary libraries by running:

```
pip install -r requirements.txt
```

### Running the Camera and Lidar Detectors

To run the camera and lidar detectors, navigate to the 'src' directory by running:

```
cd ./src
```

Then, run the main script by executing the following command:

```
python main.py
```

This will display the output of the camera and lidar detectors.

### Running the Sensor Fusion

To run the sensor fusion, navigate to the 'fusion\_result' directory by running:

```
cd ./sensor_fusion/fusion_result
```

Then, run the script by executing the following command:

```
python fusion_result.py
```

This will display the output of the sensor fusion.

## Result Explanation

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Due to the lack of timestamps in the dataset, we cannot align the processing frequency of the camera and lidar, which means that we cannot achieve real-time sensor fusion. Additionally, different CPUs may yield slightly different results. Therefore, we have included a standard processing result video based on the 8th generation Core i7 processor in the `demo` folder for your reference.