Data for Cooperative Perception of Road-Side Unit and On-board Equipment with Edge Artificial Intelligence for Driving Assistance

Dataset available at: https://doi.org/10.5281/zenodo.5738251

(This dataset supports report Cooperative Perception of Roadside Unit and Onboard Equipment with Edge Artificial Intelligence for Driving Assistance)

This U.S. Department of Transportation-funded dataset is preserved in the Zenodo Repository (https://zenodo.org/), and is available at https://doi.org/10.5281/zenodo.5738251

The related final report Cooperative Perception of Roadside Unit and Onboard Equipment with Edge Artificial Intelligence for Driving Assistance, is available from the National Transportation Library's Digital Repository at https://rosap.ntl.bts.gov/view/dot/60635.

Metadata from the Zenodo Repository record:

<u>Title:</u> Data for Cooperative Perception of Road-Side Unit and On-board Equipment with Edge Artificial Intelligence for Driving Assistance Author:

- Yinhai Wang
- Wei Sun
- Chenxi Liu

<u>Description:</u> The data consists of the data collected in the Data for Cooperative Perception of Road-Side Unit and On-board Equipment with Edge Artificial Intelligence for Driving Assistance project by Mobile Unit for Sensing Traffic (MUST). The first file contains the image data collected in University of Washington testbed. The second file is the detection results based on the collected image data.

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<u>Communities:</u> C2SMART Connected Cities with Smart Transportation License (for files): Creative Commons Attribution 4.0 International

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Dataset description:

This dataset contains 1 file collection and 1 file, described below.

C2Smart Image Data.zip:

This file collection contains 10,238 .jpg files, with the file naming structure 2021_05_15(00-23)_(00-59)_(00-59).jpg.

- Samples:
 - o 2021_05_15_23_58_43.jpg
 - o 2021_05_15_04_49_16.jpg

C2Smart Detection Result.txt

File Type Descriptions:

- The .jpg file extension is associated with JPEG (Joint Photographic Experts Group) file format. JPEG is a lossy image compression algorithm that significantly reduces the file size of the original image at the cost of quality. The higher the compression ratio the lower the quality of the .jpg file (for more information on .jpg files and software, please visit https://www.file-extensions.org/jpg-file-extension).
- The .txt file type is a common text file, which can be opened with a basic text editor. The most common software used to open .txt files are Microsoft Windows Notepad, Sublime Text, Atom, and TextEdit (for more information on .txt files and software, please visit https://www.file-extensions.org/txt-file-extension).

National Transportation Library (NTL) Curation Note:

As this dataset is preserved in a repository outside U.S. DOT control, as allowed by the U.S. DOT's Public Access Plan (https://ntl.bts.gov/public-access) Section 7.4.2 Data, the NTL staff has performed *NO* additional curation actions on this dataset. NTL staff last accessed this dataset at https://doi.org/10.5281/zenodo.5738251 on 2022-05-18. If, in the future, you have trouble accessing this dataset at the host repository, please email NTLDataCurator@dot.gov describing your problem. NTL staff will do its best to assist you at that time.