

Some Core Techniques for Safe Autonomous Driving

Data Collection

What data will you collect or create?

The following types of data are expected to be collected and/or produced:

1. Point cloud data from lidars.
2. Video streams and image data of roads with curbs.
3. Journal articles, conference papers and presentations describing the analyses and research results obtained.

How will the data be collected or created?

Point cloud data will be produced by logging data streams from lidars.

Video streams will be captured from a camera.

Publications, papers and presentations will be in pdf format.

Documentation and Metadata

What documentation and metadata will accompany the data?

1. Video data will be collected and stored in a standard codec such as H.264.
2. Still frames will be captured in JPEG format.
3. Performance data will be stored in a standard format such as comma-separated form (CSF).
4. Documents will be stored in pdf format.

Ethics and Legal Compliance

How will you manage any ethical issues?

Recordings of individuals are made with their knowledge and consent.

How will you manage copyright and Intellectual Property Rights (IP/IPR) issues?

The effort is partially funded by a third party. Institutional agreements with the third party as well as CMU-defined invention rights define the copyright and IP rights of the project outputs.

Storage and Backup

How will the data be stored and backed up during the research?

The data collected from the project will be archived on a data server in the RTML facility in CyLab on the main CMU campus. For archival purposes, all data will be stored on hard drives when the award period ends.

How will you manage access and security?

The RTML facility is accessible only to those with physical access and keys to the room. Only project members and administrative personnel have keys to the room.

Selection and Preservation

Which data are of long-term value and should be retained, shared, and/or preserved?

We will evaluate the long-term value of any data produced at the end of the project.

What is the long-term preservation plan for the dataset?

Data will be archived as specified in the archival section.

Data Sharing

How will you share the data?

Question not answered.

Are any restrictions on data sharing required?

Due to the involvement of a third-party which partly funded the project, there are restrictions on data sharing.

Responsibilities and Resources

Who will be responsible for data management?

The principal investigator is responsible for data management and to ensure that the rights of all parties involved are respected.

What resources will you require to deliver your plan?

Existing resources funded by the project are sufficient to meet the needs of this data management plan.