

Data Management Plan

Our data management plan is designed to meet the letter and spirit of NSF data-management policy as described in the following documents:

- NSF 11-1 Grant Proposal Guide: Sec. II.C.2.J Special Information and Supplementary Documentation.
- NSF AAG11-001 Award and Admin. Guide Section VI.D.4.: Dissemination and Sharing of Research Results.

Expected Data and Other Products

The expected data generated by this research includes open-source software libraries, robotic interaction data sets, and performance benchmarks. The software will be collected and stored in a GIT repository. The PIs will provide open-source implementations of parts of the software dealing with decision making and learning. A common GIT file repository will be employed for code development and data set storage. For each human experiment, the collected data will include:

- definition files with a description of the study materials used.
- trajectories with time-stamped states, controls, costs.

These materials will be completely anonymized with no personally identifying attributes. For machine experiments, we will build on the BURLAP library and will make our extensions available via GIT.

Period of Data Retention

Data will be retained for a minimum of five years after completion of the grant.

Data Formats

Human trajectory data will be stored in ASCII files along with a javascript program for interpreting/visualizing them. Other data will be stored in either ASCII or binary form.

Data Access and Sharing

The software and collected log files will be made publicly available at the time of the first release of an associated publication. The data will be posted on a Brown-maintained web server, then moved to a Brown-maintained archive at the end of the project. All data is network accessible and routinely backed up onto physical drives. Upon substantial increase in data size, the PIs will consider data-management services such as available from Brown or Google Cloud. The PIs will specify conditions for data use, designate the original source of data, and associate it with the NSF grant number.