Data Management Plan

Types of collected data and sharing policies

Five main types of data will be generated: *mathematical models and algorithms, software package, benchmarking datasets, simulation results*, and *curriculum and other promotional materials*.

- The developed *mathematical models and algorithms* will be disseminated to the research community through publications such as journal or conference papers that will be made available via arXiv.org and the PIs' websites. Restrictions and regulations for online access set by the publishing entities (e.g., IEEE) will be followed for these products.
- *Software packages, collected benchmarking datasets,* and *simulation results* will be all in text-based formats (e.g., .py, .java, and .csv) that are readable by widely accessible software packages. These data will be supplied with proper documentation and explanation, and then shared with the research community via the Github repository of HPCC Lab (https://github.com/hpcclab) and will be linked to the PIs' websites too. We will use an open-source license (e.g., MIT License) for the generated software packages.
- The *promotional materials* will be in PowerPoint and PDF formats. These files will be shared through the project and PIs' websites that are open to the public.

Roles and responsibilities

The PIs will be responsible for collection, management, and sharing of all the research data. The PIs will coordinate with the graduate and undergraduate students to store, archive, protect, and share experimental results, source codes, benchmarks, and publications.

Data preservation and archiving

All the data from the research activity will be shared between PIs via Dropbox storage service. In addition, the data will be <u>backed up monthly on external hard drives</u> by the PIs. At the end of each semester, a copy of all the research data is stored centrally on a storage cloud owned by the University of North Texas. The data will be kept for at least 5 years beyond the life of the project. References, annual reports, research papers, original proposal documents, source codes, experimental and simulation data will be included in this repository. Date, time, and place of creation, authorship, revision, and upload versions will also be documented alongside the data for future reusability purposes.