Plan Overview

A Data Management Plan created using DMP Tool

Title: SaTC: CORE: Small: Cryptographic Software Fingerprinting

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SaTC: CORE: Small: Cryptographic Software Fingerprinting

Roles and responsibilities

The Data Management Plan should clearly articulate how the PI and co-PIs plan to manage and disseminate data generated by the project. The plan should outline the rights and obligations of all parties as to their roles and responsibilities in the management and retention of research data, and consider changes that would occur should a PI or co-PI leave the institution or project. Any costs should be explained in the Budget Justification pages.

The PI will have full responsibility for data management during the course of the project and will train student employees upon hire. Our department's system administrator, Ray Koehl, will be responsible for maintenance of the local gitLab server where our data will reside during the project, with buget oversight provided by the department's office manager, Clare Maliniak. Mr. Koehl and Mrs. Maliniak (or their successors in these roles) will be responsible for continued maintenance after completion of the project.

Types of data

The Data Management Plan should describe the types of data, samples, physical collections, software, curriculum materials, or other materials to be produced in the course of the project. It should then describe the expected types of data to be retained and shared, and the plans for doing so. The DMP should cover how data are to be managed and maintained during the project.

Given the algorithmic and mathematical nature of the proposed work, large-scale data collection is not expected to be part of the project. Data generated in the course of the project will include draft papers, software prototypes, configuration files, samples of code before and after fingerprinting, network traces, server logs, and data on software performance. Data will be gathered using standard Unix tools such as pcap and wireshark.

Policies for access and sharing and appropriate protection and privacy

The Data Management Plan should describe the period of time the data will be retained and shared; factors that limit the ability to manage and share data, e.g., legal and ethical restrictions on access to human subjects data; and provisions for appropriate protection of privacy, confidentiality, security, and intellectual property.

During the period of performance, all data will be stored on private gitLab servers maintained by the department of physics, computer science, and engineering at Christopher Newport University; these servers are regularly backed up off-site. All software written in the course of this work will be open-source and will be made available to other researchers. No special-purpose software or hardware will be required for access.

No data on individuals will be gathered and no privacy issues are expected to arise.

Data storage and preservation of access

The Data Management Plan should describe the mechanisms and formats for storing data and making them accessible to others, which may include third party facilities and repositories; and other types of information that would be maintained and shared regarding data, e.g. the means by which it was generated, detailed analytical and procedural information required to reproduce experimental results, and other metadata.

Upon project completion all data will be moved from local gitLab servers to a public gitHub site, which is a stable, readily available, and well-maintained repository for open-source information. The PI will maintain responsibility for any continued management that might be necessary. Data will be available indefinitely. All data will be preserved, with the possible exception of very early drafts of papers and small test datasets generated during the earliest stages of the project. We will provide a user guide to aid future researchers in understanding how the data was gathered and how it can be used in further work.

Additional possible data management requirements

Note that individual solicitations may have additional data management plan requirements. If guidance specific to the program is not available, then the requirements established in the Grant Proposal Guide apply.

Question not answered.