

SaTC: CORE: Small: Cryptographic Software Fingerprinting

Roles and responsibilities

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 budget oversight provided by the department's office manager, [REDACTED] (or their successors in these roles) will be responsible for continued maintenance after completion of the project.

Types of data

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

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

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