## Tutorial: Data sharing from a computer or cluster via SeedMe.org

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**Duration:** 90 minutes

Skill Level: Introductory/Beginner

**Pre-requisites:** Basic familiarity with command line tools like changing directory and executing commands.

Networking: Internet access will be required for this tutorial

## **Requirements:**

- 1. Computer/Laptop (Mobile devices are not sufficient for this tutorial)
- 2. Account on SeedMe.org (Attendees could create an account at the tutorial\_
- 3. <u>Download</u> SeedMe Python client
- 4. <u>Download</u> sample data

High performance computing processes and workflows often have several steps for example input preparation, computation monitoring, output validation, analysis and visualizations. All these processes yield small-scale consumable data such as computation progress, statistics, plots that are of high value for research team. Sharing and accessing this information by team members is often slow and cumbersome in current HPC environment. SeedMe platform lowers these barriers by providing cyberinfrastructure and necessary tools for data sharing.

This tutorial will introduce attendees to the SeedMe (Stream encode explore and disseminate My experiment) platform and show how this platform can be leveraged to share data rapidly with easy to use tools in ad hoc and/or automated manner. We will also show how to create videos from set of images, which may be useful for sharing visualization results.

The tutorial will cover the following topics

- 1. **SeedMe platform overview** (Lecture 15 mins) Learn about the platform and terminology
- Web Browser interaction –(Hands On 15 mins) Learn organization, navigation and usage via web browser for editing, uploading data, commenting, sharing and notifying.
- 3. Automation Set up (Hands On 5 mins) Learn to set up the environment for command line and programmatic interaction
- Command line interaction (Hands On 25 mins) Learn to use SeedMe command line tools. These tools could be used on HPC platform.
- 5. **Programmatic interaction** (Hands On 25 mins) Learn methods available in Python client/module and use them in sample example
- 6. **Scientific apps** (Lecture 5 mins) Overview of scientific applications that have SeedMe integration

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