DATASET Ideas Lab Call for 1-Page Concepts – NSF AI Institutes (Pilot)

Submission Instructions: Please submit your concept paper to data-science-hub@utah.edu by Sunday August 20, 2023, 11:59pm MT.

Overview

The DATASET Initiative is calling for 1-page concept proposals which will be supported through an Ideas Lab starting as early as September 1, 2023.

Concepts should be cross-cutting ideas that require multi-disciplinary solutions and should be within the scope of the NSF AI Research Institutes. There are two upcoming deadlines for topics in three themes:

- Theme 1: Al for Astronomical Sciences (two awards with Simons Foundation)
- Theme 2: Al for Discovery in Materials Research (one award with Intel Corporation)
- Theme 3: Strengthening AI (two awards with potential agency partners, partial funding of one award by Capital One) with research foci in environment, health, public good, economic security, etc.

Preliminary proposals are due October 31, 2023 for Theme 1 and January 12, 2024 for Themes 2 and 3. Concepts that align with the mission of the DATASET Initiative will be prioritized for support, however strong ideas outside of this mission may be supported with other resources.

Background on DATASET

The DATASET Initiative is designed to engage foundational questions about the role of data in science and society. It aims to bring together research and expertise in the theoretical, technical, ethical, policy/legal, economic, and managerial dimensions of data across the university to critically examine the function and impact of data, data infrastructure, and data science in addressing grand challenges. This initiative is part of the One Utah Data Science Hub, a university-wide effort designed to enhance research and infrastructure in data science as well as advance and accelerate discoveries and innovations enabled by data.

Ideas Lab Structure and Participation Expectations

DATASET Initiative sponsored Ideas Labs will provide a collaborative and creative space where teams can come together to generate, develop, and refine new ideas and solutions around specific concepts. We aim to foster creativity, brainstorming, and problem-solving in a structured and facilitated environment, however the specific format of the Ideas Lab can vary depending on the concept and team. Additional information on Ideas Labs from NSF on <u>understanding the olfactory system</u> and <u>designing crops of the future</u> may also be helpful.

It is expected that the submitting faculty member of any concept will participate in the Ideas Lab of their concept, should their proposal be selected.

Concept Proposal

Each concept proposal should be one page or less and should include the following sections:

- NSF Al Institutes Theme Area and Title
- Concept Summary Describe your idea and how it fits into Al and the NSF Al Research Institutes
 themes.
- List of Potential Participants Include potential faculty, by name or department, who could be
 included in the Ideas Lab, ensuring participation across the university.
- Proposed Timeline and Process Describe the rough format for the Ideas Lab that would support
 this concept, including the number and length of facilitated sessions and approximate timeline to meet a
 preliminary proposal submission aligned with the appropriate deadline.

Evaluation of Proposals

Proposals will be reviewed by the leadership of the DATASET Initiative. Primary review criteria include:

- Alignment with the NSF AI Research Institutes funding opportunity and the mission of the DATASET Initiative.
- Strength of the concept for catalyzing novel and cross-cutting research directions and collaborations.