Humanities and AI Virtual Institute

Supporting innovative research that integrates AI with the humanities

EOI: APPLY HERE

Overview

Schmidt Sciences, a philanthropic initiative created and funded by Eric and Wendy Schmidt, has launched a new program – the Humanities and Artificial Intelligence Virtual Institute (HAVI) – to support research at the intersection of AI and the humanities. The purpose of HAVI is to provide philanthropic resources to (1) catalyze groundbreaking, domain-specific research outcomes from humanities scholars through the integral application of AI-inspired tools and techniques; and (2) produce insights and techniques from the humanities that will advance the development of AI generally.

HAVI seeks to produce these outcomes by encouraging foundational, collaborative contributions from humanities scholars working together with AI researchers. We expect complementary research teams working in close collaboration to produce

advances both in AI and in the humanities. Humanities scholars should play integral roles in the development and use of AI methods, and AI researchers should develop a deeper understanding of data, models, and problem spaces from a humanistic perspective and for humanistic applications.

HAVI expects that this collaborative approach will deepen our understanding of fundamental constraints and limitations of current approaches, leading to the advancement of future systems and breakthrough results in both AI and humanities scholarship. For example, the tendency of AI systems to reinforce existing solutions and behaviors rather than to find novel, varied, individualized outcomes is a challenging drawback that poses serious limitations on future systems. Emerging systems are attempting to overcome lack of novelty with brute force effort (massive trial and error) over vast search spaces. But directed, curated, contextualized cues from deep humanistic understanding presents an additional avenue for advancement. HAVI hopes to motivate interdisciplinary, collaborative teams that will forge ambitious new pathways for understanding and overcoming the limitations posed by such homogenizing tendencies. Likewise, AI approaches that struggle to operate in and fully exploit the richness and complexity of multilingual contexts and multimodal datasets presents a monumental future challenge for next-generation methods. HAVI will encourage collaborative, interdisciplinary research teams who will work on fundamental problems and projects to overcome such obstacles and thereby unlock transformational outcomes in both the humanities and in AI.

We expect that the resources available through HAVI will fuel new ways to overcome barriers between disciplines; develop and make available exciting, rich, multimodal datasets; change the thinking of AI researchers – and lead to new approaches – through a humanities-first understanding of data, models, and processes; and reveal crucial insights about how humanities can and should shape next-generation AI.

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[1] We refer to the broad definition of the humanities by the National Endowment for the Humanities, the only Federal Agency in the United States dedicated to funding the humanities: https://www.neh.gov/about

Expressions of Interest (EOI)

Submission Deadline April 4th, 2025

We seek brief Expressions of Interest (EOIs) that align with the HAVI priority areas outlined below, request funding levels commensurate with their scopes of work, and emphasize the interplay and the synergy of humanities and AI.

HAVI Priority Areas

HAVI encourages projects that will lead to:

- Specific outcomes seen by the field as major steps forward, solutions to longstanding problems, or innovative approaches that open up entirely new pathways of inquiry.
- Construction of datasets (or new methods of data acquisition / construction) with properties that reduce or eliminate current problems in AI. Dataset construction should include use cases and validation approaches.
- Integration of humanities approaches and agency in AI model training, construction, and usage.
- Exploration of AI-based approaches that the field sees as risky, but with high impact if successful.

As a result, projects must strongly align with one or both of the following priority areas:

Heterogeneity and Contextual Understanding

HAVI seeks projects that identify and operationalize a multiplicity of cultural, material, and perceptual differences – in both AI and the humanities – in order to disrupt the current propensity for homogenization of data leading to model ineffectiveness. Projects that address the challenge of heterogeneity hold the potential to transform humanities scholarship by generating deep and systematic understanding, tools, methods, concepts and approaches while also building diverse AI ecosystems.

Existing AI systems inadequately represent the heterogeneity of historical situations, cultural perspectives, human languages, aesthetic sensibilities, styles and forms of ambiguity, and other dimensions of cultural artifacts. Projects seeking to expand AI's usefulness not only for humanistic research but for broad social application might include new research questions and findings, methods, or forms of social impact. We expect projects will produce outputs that include open datasets, open-source models, and best practices for evaluation and reproducibility, accelerating research across a wide range of fields.

The following instances are meant to guide project development but are not an exhaustive or limiting list of topics. Successful projects in this priority area could, for example:

- Develop methods that resist trends toward monoculturalism.
- Challenge cultural standardization and mitigate bias in models, data, pipelines.
- Address the limits of encoding, embedding and tokenization.
- Develop a suite of benchmarks to evaluate a model's ability to generate outputs that are historically specific or culturally representative.
- Develop novel approaches to ablate and control for historical or cultural knowledge from pretrained models.
- Assuming the existence of culturally or historically representative AI systems, devise simulation-based experiments to measure the impact of counterfactual events or circumstances.
- Use socially validated models to measure the social effects of similar narrative forms (the novel, lyric poetry) or story types across diverse cultural contexts.

Multimodal and Multilingual Understanding

While AI methods focusing on text already inspire and shape new aspects of humanistic inquiry, many objects of humanities interest exist beyond text – visual art, photography, film and television, music, advertisements, theater, and dance, for example. Accelerating research in these non-textual areas will require the invention of new methods in multimodal understanding, as well as improving methods developed for non-humanistic data so that they can be applied to humanities topics. Such projects will bring together theories and practices of the humanities to guide and create AI approaches that contribute new knowledge in fields that are difficult to study at scale, such as art history, media studies, film studies, and theater studies.

In addition, embracing linguistic diversity and achieving consistency across multilingual inputs is an ongoing challenge with potential for high global impact. HAVI encourages projects that will increase linguistic diversity and multilingual capabilities in AI systems and explore the broadest possible range of cultures, languages, and contexts.

The following instances are meant to guide project development but are not an exhaustive or limiting list of topics. Successful projects in this priority area could, for

example:

- Engage multi-lingual, indigenous languages, and epistemological paradigms – with focus on unique approaches across “low density languages” that can answer important questions for those communities / repositories / corpora.
- Allow LLMs to operate in multiple languages at the same time, making explicit the differences and similarities that are rooted in the nuance and uniqueness of language structure, and seeking to understand the breadth and depth of connection of linguistic differences to resulting features in trained models.
- Advance AI-inspired approaches to the study of visual art, photography, film, TV, advertisements, theater, dance, social media, video essays, (video) oral histories, and animation.
- Incorporate multimodal data into domain-specific datasets and models (e.g., healthcare/medical) to address issues such as mistrust, precision outputs, inclusion of narratives, images, historical documents.
- Develop and advance core technical objectives (object detection, pose estimation, image and temporal segmentation) with new culturally-specific, humanities-relevant models.
- Explore new data and models for cultural phenomena that have so far eluded measurement.
- Build outputs (e.g., datasets, models, software systems) that will form a core set of future building blocks for the field.

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Out-of-Scope Topics

Although the topics below are important and may be the focus of future Schmidt Sciences grantmaking efforts, they will be considered out-of-scope for the current request for proposals:

- The creation of AI-aided artistic works.
- Policy, policy-adjacent and advocacy projects.
- Projects that employ primarily or exclusively critical and humanistic methods.
- Projects focused primarily on pedagogy and curriculum development.

- Development of AI methods without a humanities focus; humanities-based projects that do not propose the use of AI.
- Non-technical aspects of AI, including ethics, policy, and governance research.

Funding Levels and Expected Outcomes

HAVI plans to support projects at three funding levels to cover a spectrum of project maturity levels and scopes-of-work. Applicants must identify their appropriate budget category and specify a project timeline varying from one to three years:

1. Small awards
    - Under $100,000 per year
    - Support small-scale efforts at early, exploratory stages
2. Medium awards
    - $100,001 to $500,000 per year
    - Support research and development that has completed initial phases of planning and is ready to initiate projects that will produce specific, novel outcomes
3. Large awards
    - $500,001 to $1.5 million per year
    - Support interdisciplinary research efforts designed to produce groundbreaking humanities research, new AI tools, datasets, and models through deep interaction with AI theory, systems, and methods.

Award Process

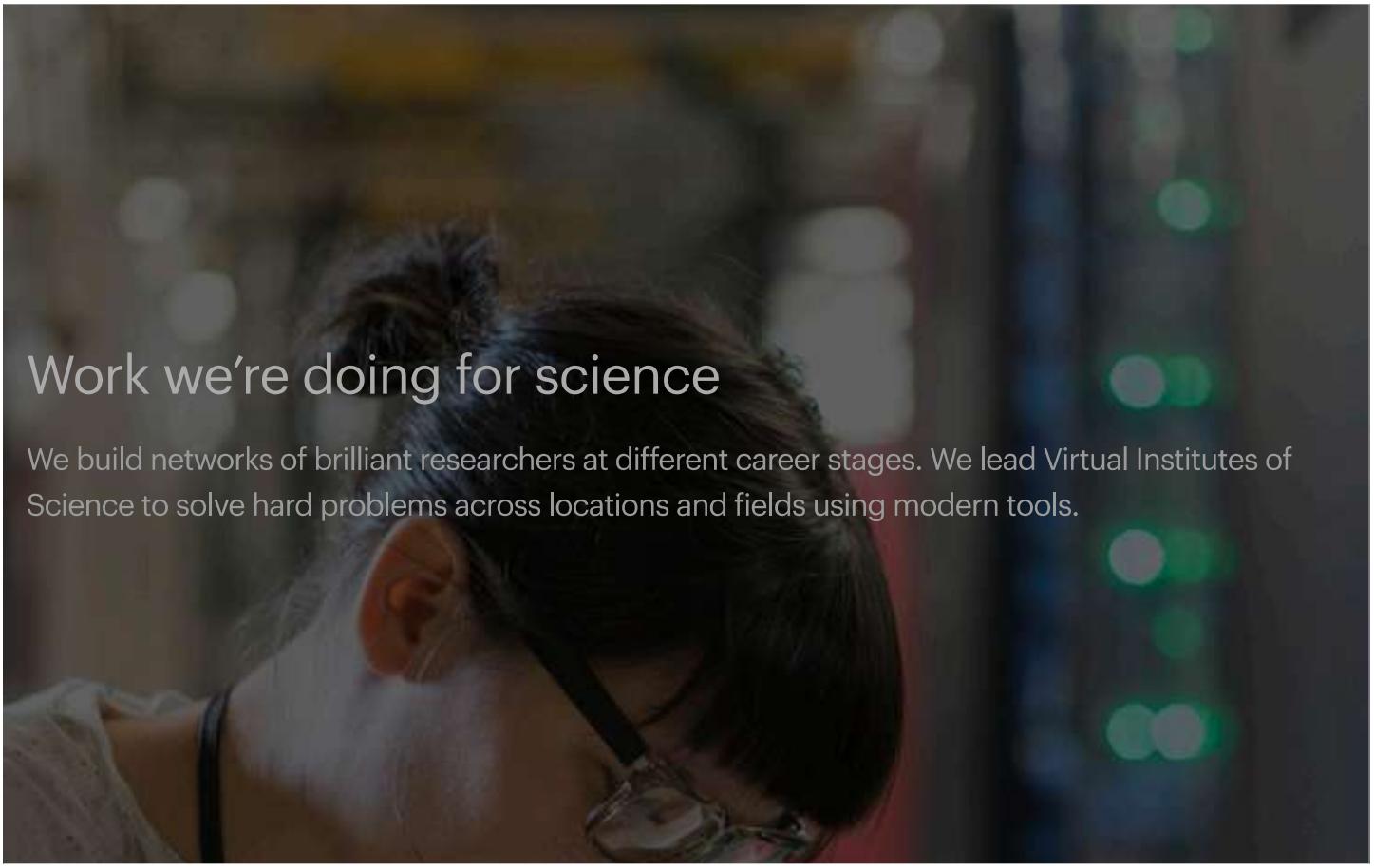
EOIs will be evaluated in a first round of reviews. Successful applicants will be invited to submit full proposals, which will be evaluated in a final round leading to the notification of awards. The final stage of the process will be a contracting step to deliver funds and launch projects in Fall 2025.

Helpful Resources

The following resources will answer questions and guide the preparation of materials for those who wish to respond to this call:

- The frequently asked questions page (FAQ) answers basic questions about the program and submission guidelines.
- Information sessions: Two webinars with Q&A will be held for this program.
  - **Information Session 1**: March 12 at 9am EST (**View Recording Here**)
  - **Information Session 2:** March 19 at 2pm EST (Register Here)

All questions should be directed to HAVI@schmidtsciences.org.



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