Columbia University
Data Science Institute

Seed Funds Program
Funding Opportunity for Faculty and Research Staff

Every field has data. We use data to discover new knowledge, to interpret the world, to make decisions, and even to predict the future. The recent convergence of big data, cloud computing, and novel machine learning algorithms and statistical methods is causing an explosive interest in data science and its applicability to all fields. This convergence has already enabled the automation of some tasks that better human performance. The novel capabilities we derive from data science will drive our cars, treat disease, and keep us safe. At the same time, such capabilities risk leading to biased, inappropriate, or unintended action. The design of data science solutions requires both excellence in the fundamentals of the field and expertise to develop applications which meet human challenges without creating even greater risk.

The Data Science Institute at Columbia University is a world-leading institution in research and education in the theory and practice of the emerging field of data science.

The Data Science Institute's mission is:
1. Advance the state of the art in data science
2. Transform all fields, professions, and sectors through the application of data science
3. Ensure the responsible use of data for the benefit of society

It is in this context that the Data Science Institute at Columbia University promotes "Data for Good": using data to address societal challenges and bringing humanistic perspectives *as*—not after—new science and technology is invented.

Program Goal

The goal of the DSI Seeds Funds Program is to support new collaborations that will lead to longer term and deeper relationships among faculty in different disciplines across campus. Aimed at advancing research that combines data science expertise with domain expertise, the DSI Seed Funds Program focuses primarily on the second and third parts of DSI's mission statement. We are as interested in the application of data science to all domains as in bringing in the sensibilities of other domains, especially to address the fair and ethical use of data.

The Institute is thus pleased to announce a call for proposals from Columbia University faculty and research staff for DSI Seed Funds. We are looking for novel projects that bring together scholars into a team that aspires to do research that no one individual team member could achieve alone. We especially encourage, but do not require, using Seed Funds to support graduate students, post-docs, and/or applied data scientists who will work at the intersection of data science and other domains. We seek proposals that represent new collaborations, which ideally can prepare them for future proposal submissions to government, industry or foundations.

Funding

Funding is available for up to five projects, up to $100,000 annually, for a maximum of two years. As a condition of funding, awardees will be required to submit quarterly financial reviews and biannual progress reports. Eligibility for continued funding for a second year will also require a progress report. All reports must include progress on external funding proposal submission(s).

Proposal Process

The deadline for submission is Wednesday, November 1, 2017 by 3:00 pm.
We will not accept incomplete or late submissions.
We anticipate notifying award recipients by December 15, 2017.

Please submit the following materials via email, in **.doc** or **.pdf** format, to dsi-seed@columbia.edu, by the **Wednesday, November 1, 2017, 3:00 pm deadline**:
- Application Cover Page, Project Proposal and Budget
- CV's for Faculty/Collaborators (2 page NSF style format)

The Data Science Institute's review committee for submitted proposals will consist of members of the Institute's Executive Committee and Center Chairs. An external reviewer (e.g., domain expert) may be asked by the review committee to assist with the review process. In an effort to mitigate conflicts of interest, members of the review committee who are included in others' proposals, or who wish to submit a proposal in their respective research area, will be excused from the review process and any decision regarding proposal funding.

COLUMBIA UNIVERSITY
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Seed Funds Program   Application Cover Page

CONTACT INFORMATION (PI's and Collaborators)

First Name	Last Name	Title	Dept.	Email	Phone

(If additional contacts are needed, please check here,_____, and provide supplemental listing before CV's.)

SCOPE OF PROPOSAL

Title of Seed Funding Proposal	External Funding Seeking	External Proposal Deadline(s)
	Proposals must identify specific large-scale funding opportunities for which the applicants will compete.	

Seed Funding Amount Requested:	Anticipated External Funding Award Amount:
Maximum request: $100,000.00 per year, 2-year maximum. Eligibility for 2nd year conditional upon demonstrated progress.	DSI Seed Grant aims to provide support for developing successful large scale funding opportunities.

PROPOSAL REQUIREMENTS

Please provide the following information:

- A. Completed Application Cover page
- B. Project Proposal* (5-page maximum, single space, 12-font, Times New Roman)
- C. Budget with narrative
- D. CV's for PI's and Collaborators ([2 page NSF style format](#))

* **These criteria will be used in ranking and selecting submissions for seed funding:**

1. Why the proposed project is novel. Contrast to prior work is recommended.
2. Why seed funding is essential to the success of this project
3. How the project is necessarily inter-/multi-disciplinary
4. The novelty of the collaboration, in terms of people, disciplines, and/or schools
5. The intended follow-up to this project for obtaining future funds, especially plans to submit to large-scale funding opportunities

All projects must be relevant to advancing and/or applying data science as a field.