Post-Doctoral Fellows Program
Funding Opportunity for Ph.D. Graduates

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. Started in 2012, it is now a university-level institute representing over 250 affiliated faculty from 12 different schools across campus. Data science literally touches every corner of the university.

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 Goals

For the DSI Post-Doctoral Fellows Program, we seek candidates who are recent Ph.D. graduates and have explicit interests in advancing and/or applying data science to other domains. Prior experience in data science is *not* required. We are especially looking for candidates with the courage and interest to learn a new field, be part of a select like-minded cohort of fellows, and along with Columbia University DSI members, help define the field of data science for the long-term future. We encourage applications from candidates with diverse backgrounds, experiences, and identities.

Appointment and Funding

Appointments for the first class of DSI Fellows start **July 1, 2018**, with guaranteed funding for two years. In addition to a competitive salary package, DSI Fellows will also be provided with a research expenditure budget of that can be used for conference travel, computing equipment, and/or other research-related costs.

Application Process

The candidate should identify two-five names of potential mentors who are current Columbia faculty members. A good place to look for mentors would be the list of DSI faculty affiliates but candidates are welcome to look beyond this list. If you are interested in applying data science to a specific domain, we encourage you identify mentors from both a foundational area (applied mathematics, computer science, electrical engineering, machine learning, optimization, statistics, etc.) and a domain area. Using your input, the DSI will ensure the best possible match of mentor(s) for you.

To apply, please submit the following materials to dsi-fellows@columbia.edu. Evaluation of applications by a review committee will start after **December 1, 2017** and continue until the positions are filled. Candidates are encouraged to apply as early as possible and preferably before December 1, 2017.

- A cover letter that explains your motivation for applying to this program and indicates your choice of mentors;
- A curriculum vitae (including a list of publications);
- A brief research statement that summarizes current research interests, past accomplishments, and future research goals. It should contain a short proposal for the research activities you plan to do as a DSI Fellow, including a schedule with milestones;
- Up to three representative research papers;
- Three letters of reference submitted directly by the recommenders to dsi-fellows@columbia.edu
- [Optional] A letter from a potential mentor indicating an interest in your candidacy and your proposed research activities, submitted directly to dsi-fellows@columbia.edu

Offers will be made on a rolling basis, with final Fellowship decisions made by **April 1, 2018**.